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ABSTRACT

This second biennial report on children presents information pertaining to children, discusses the implications and use of such information in planning for children, describes certain historical trends affecting children, and provides updates of statistics and significant expansions on many topics covered in the 1975 report. Part A examines basic trends from a demographic perspective, focusing on trends in the general population, components of growth in the population, and the family. Part B describes the status of children, conditions affecting them, and programs designed to benefit the family and children. Part C, a detailed discussion of the use of information, describes three case studies illustrating the use of information about children in decision making. Numerous graphs and charts provide information pertaining to topics such as birth, fertility and mortality rates, population growth, income and unemployment rates, marriage rates, adolescent pregnancy, nutrition, mental health, children in single parent families, and social and economic data on families. The appendix includes a list of federal programs. (CM)

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THE STATUS OF CHILDREN 1977

by

Kurt J. Snapper
and
JoAnne S. Ohms

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INTRODUCTION

The Status of Children 1977 is the second biennial report on children. The previous report, prepared in 1975, was the first attempt to compile and describe statistics from a wide variety of both federal and nonfederal sources pertaining to children, and to the conditions, trends, and programs that affect them.

The Status of Children 1977, in addition to describing current statistics, provides updates of the statistics analyzed in the previous report and describes certain historical trends. In this sense, the current report may stand alone as a reference document. However, the 1977 report also includes significant expansions on many topics covered in the 1975 report. Further, the statistics reported in the individual tables and figures have been expanded to permit more detailed levels of analysis or cross-tabulation. The basic purpose, however, remains the same: to present information pertaining to children, and to discuss the implications and the use of such information in planning for children.

The Status of Children 1977 is divided into three distinct but conceptually interrelated parts. Part A examines basic trends essentially from a demographic perspective. Chapter 1 focuses upon trends in the general population and upon components of growth in the population. Chapter 2 has a similar orientation, but focuses on the family.

Part B describes the status of children, conditions affecting them, and programs designed to benefit the family and children. Chapter 3 begins where Chapter 2 "left off"--with the family. It attempts to describe some of the conditions of families which may place children at

risk, and then turns to a description of some key programs providing human development services. Chapters 4 and 5 examine some selected issues in health and education, as well as developmentally-oriented programs with health or education as a primary focal point.

Part C discusses in detail the use of information, with an emphasis on the use of information about children for decision making. Chapter 6 discusses past critiques of information utilization, but is primarily devoted to describing three case studies on the use of information pertaining to children. Chapter 7 discusses some of the tendentious issues about more efficient and effective future use of information. Dissemination/acquisition processes and the use of information in the analysis of decisions are discussed.

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PART A

OUR CHANGING DEMOGRAPHIC PROFILE

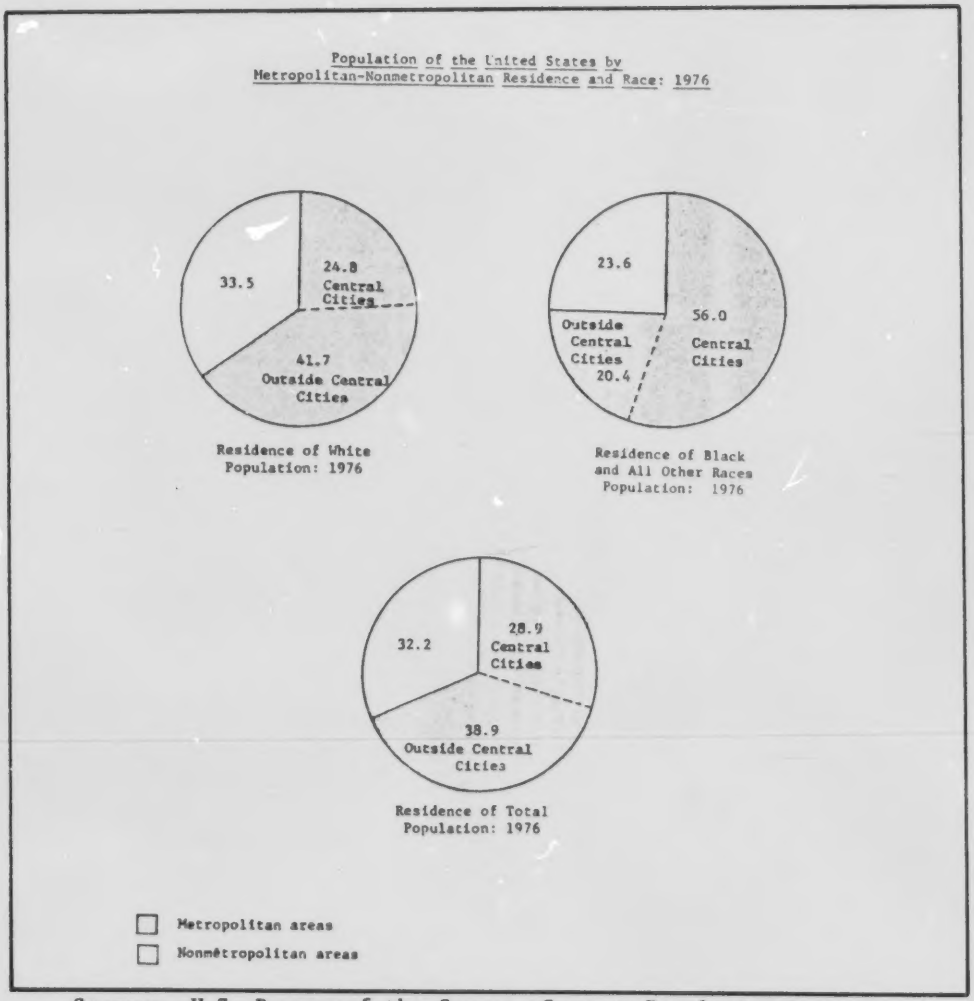
CHAPTER 1: GENERAL POPULATION TRENDS

The 1970s have been a period of change for the population of the United States. Some of the changes are attributable to long-range trends, and often extend further into the past than one might realize. For example, it is well-known that birth rates have been declining steadily since the baby boom which followed World War II. This "contemporary" phenomenon, falling birth rates, actually extends back to at least 1800; and the baby boom has been the only significant interruption of that trend. Some trends are of somewhat more recent onset; for example, there has been a steady decline in infant mortality rates, apparently beginning about the turn of the century. Other data suggest a similar trend in maternal mortality beginning somewhat later, about 1930.

Trends in Migration and Residency

Other trends have not proven so robust and have weakened or even reversed. Of these, perhaps the most interesting and important are trends in migration and residency. For example, there has been a pattern of migration from the southern portions of the country to the north, often to the major industrial centers. Recently, however, this trend has slowed and shifted and there is increased migration back to the sunbelt and the southern states.

In all areas of the country large segments of the population continue to live in metropolitan areas, partially as a result of a long-term rural to urban shift. Exhibit 1-1 shows that, in 1976, less than one-third of the total population lived in nonmetropolitan areas. This exhibit also shows that the black population continues to be more urban and more concentrated



Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 307, "Population Profile of the United States: 1976," U.S. Government Printing Office, Washington, D.C., 1977, Table 19.

EXHIBIT 1-1

in central cities than the white population. In 1976, 76.4% of blacks, as compared to 66.5% of whites, lived in metropolitan areas. Differences are larger when central cities are considered: blacks are overrepresented by more than two-to-one compared to whites--56.0% as compared to 24.8%. Moreover, Exhibit 1-2 suggests that the decrease noted in the overall population may be attributable to whites rather than blacks leaving metropolitan areas (or not migrating to them). The percentage of whites in metropolitan areas

Population in Metropolitan Areas: 1974, 1975 and 1976*

Year and Area	All Races		White		Black and All Other Races	
	Number	Percent	Number	Percent	Number	Percent
1974						
Total	208,105	100.0	181,503	100.0	26,602	100.0
Metropolitan Areas	142,223	68.3	121,875	67.2	20,347	76.5
In Central Cities	61,836	29.7	46,758	25.8	15,078	56.7
Outside Central Cities	80,386	38.6	75,117	41.4	5,269	19.8
Nonmetropolitan Areas	65,882	31.6	59,628	32.9	6,255	23.5
1975						
Total	208,683	100.0	181,636	100.0	27,047	100.0
Metropolitan Areas	141,993	68.0	121,277	66.8	20,716	76.6
In Central Cities	60,902	29.2	45,559	25.1	15,343	56.7
Outside Central Cities	81,091	38.8	75,718	41.7	5,373	19.9
Nonmetropolitan Areas	66,690	31.9	60,359	33.2	6,331	23.4
1976						
Total	210,332	100.0	182,638	100.0	27,694	100.0
Metropolitan Areas	142,567	67.8	121,392	66.5	21,175	76.5
In Central Cities	60,730	28.9	45,215	24.7	15,515	56.0
Outside Central Cities	81,837	38.9	76,177	41.7	5,660	20.4
Nonmetropolitan Areas	67,765	32.2	61,246	33.5	6,519	23.5

*In thousands, in specified populations. Data are based upon April-centered annual averages from the Current Population Survey. "Metropolitan population" refers to persons dwelling in the 243 Standard Metropolitan Statistical Areas in 1970. Data for central cities refer to boundaries as of January 1, 1970.

Tabulations based on U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 279, "Population Profile of the United States: 1974," U.S. Government Printing Office, Washington, D.C., 1975, Table 15; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 292, "Population Profile of the United States: 1975," U.S. Government Printing Office, Washington, D.C., 1975, Table 15, pg. 23; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 307, "Population Profile of the United States: 1976," U.S. Government Printing Office, Washington, D.C., 1977, Table 19, pg. 26.

EXHIBIT 1-2

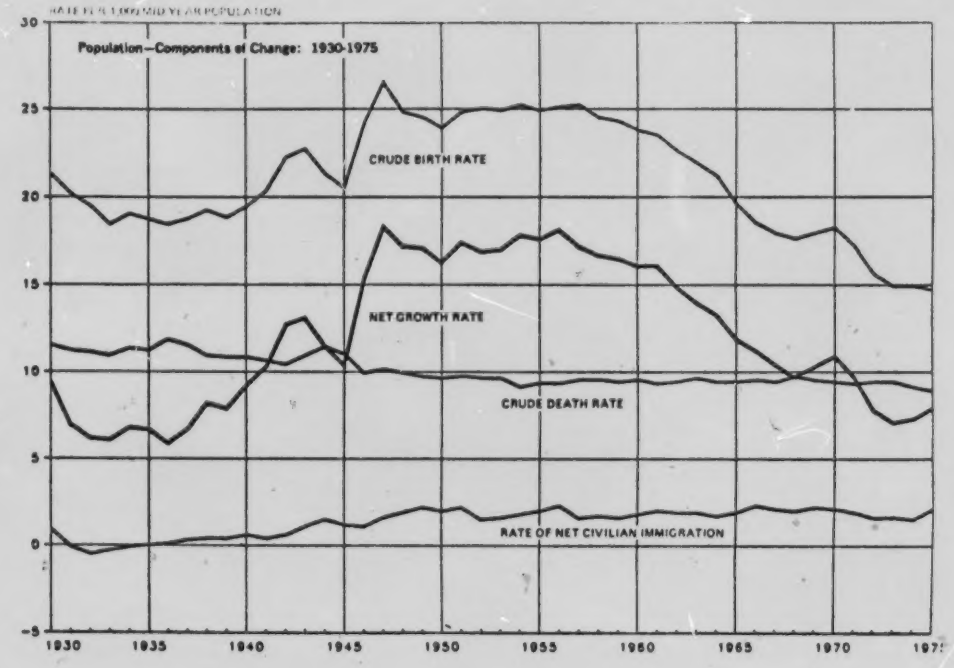
declined from 67.2% to 66.5%, whereas the percentage of blacks in metropolitan areas as of 1976 was the same as in 1974: 76.5%. Both blacks and whites and the overall population in inner cities declined slightly in 1976, as compared to 1974.

Although the general population continues to be predominantly metropolitan, the data in Exhibit 1-2 reflect a marked change in the growth pattern of metropolitan areas which should be highlighted. Between 1970 and 1974, there was a slowing in the growth rate of metropolitan areas, relative to the growth rates of metropolitan areas in the 1960s. As Exhibit 1-2 suggests, however, there has been an actual decline in metropolitan residency between 1974 and 1976; over that period the percentage of the total population living in metropolitan areas decreased from 68.3% to 67.8%. Thus, the mid-1970s may mark the beginning of a new trend--the decline of populations in metropolitan areas.

Birth and Fertility Rates

Exhibit 1-2 shows that there has been continuing growth in the number of persons in the population. The components of change which underlie that growth are shown in Exhibit 1-3. As the figure shows, trends in these components of change have been fairly systematic and have been continuing for approximately one-quarter century, and have led to a fall in the net growth rate.

Of the three components of growth, birth rates have changed most dramatically. Despite periodic speculation and conjecture about a new baby boom, caused by couples who have heretofore postponed pregnancy, the slight increase in the late 1960s proved transient and there has been no upturn since then. Because the death and immigration rates have not changed much,



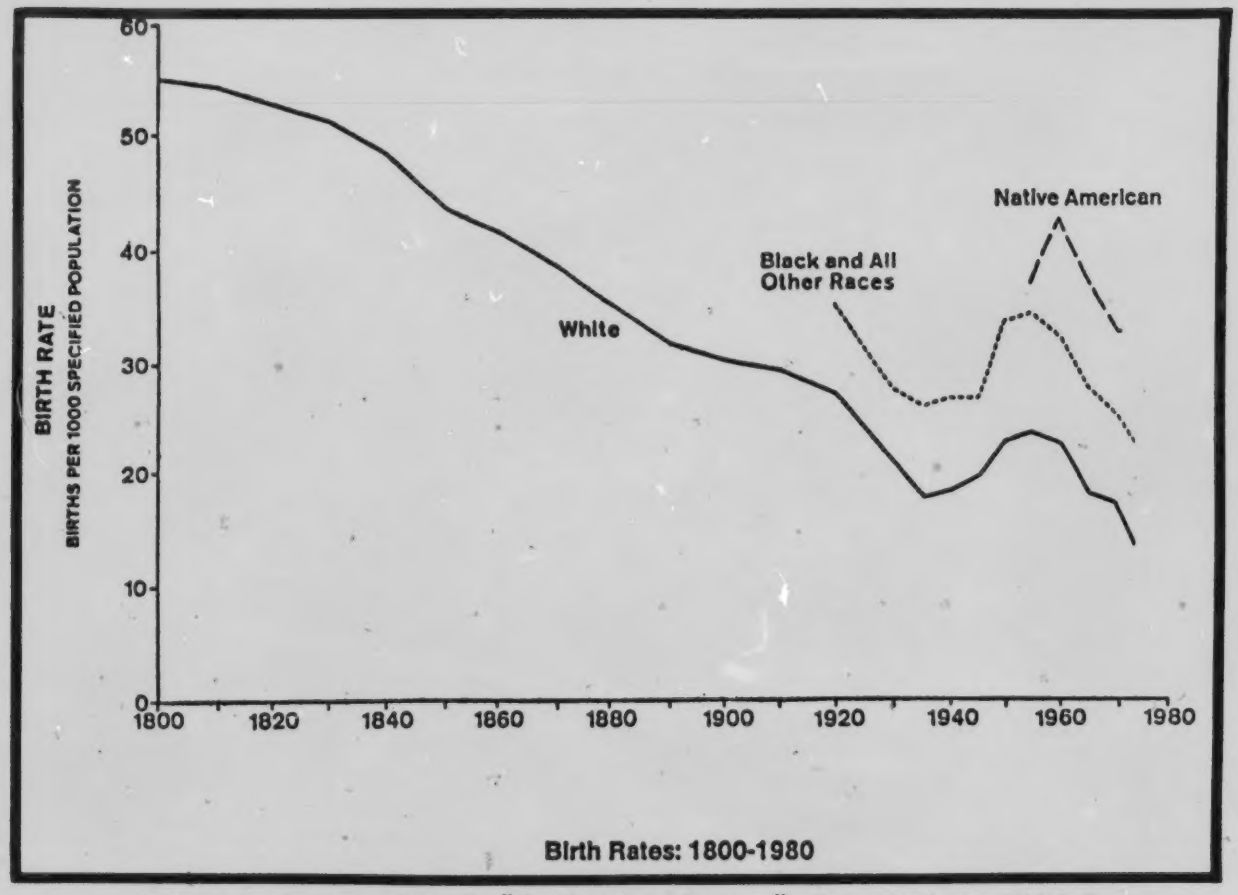
Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C., U.S. Government Printing Office, August 1976, page 5.

EXHIBIT 1-3

most of the decline in the net growth rate between 1960 and 1975 (from 16.1 to 7.9 per 1,000 mid-year population) is attributable to the falling birth rate.

As mentioned at the beginning of this chapter, there is sometimes a tendency to regard falling birth rates as a contemporary phenomen--but in fact the decline in recent years is a part of a long-term trend. This trend is shown in Exhibit 1-4.* In the early years of our nation extremely high birth rates helped compensate for high mortality rates and short life expectancies. Although complete and accurate data are not available, the decline in birth rates apparently accompanied the decline in death rates.

*Estimates from earlier years are unreliable and only partially comparable with data from more recent years; thus, they should be regarded as only rough approximations. Data for more recent years are plotted for five-year intervals only.



Source: Snapper, Kurt J. "The American Legacy." In: Grotberg, Edith H., ed. 200 Years of Children. Washington: U.S. Department of Health, Education, and Welfare, Office of Child Development, 1976. (DHEW Publication No. (OHD) 77-30103) pp. 13-38.

EXHIBIT 1-4

Data for more recent years, as shown in Exhibit 1-4, suggest some clear commonalities between ethnic groups. Thus, each group had a baby boom at about the same time, and birth rates have declined since then for each group. Exhibit 1-5 shows this decline, using fertility rates. (Fertility rate is defined as births per 1,000 women 15-44 years of age, rather than as births per 1,000 persons in the total population. The latter figure is the birth rate. Since there are fewer women 15-44 than there are persons in the total population, fertility rates are always higher than birth rates for a given number of births.) Provisional data for 1976 show a decline in fertility

Fertility Rates: 1965-1976*

YEAR	RACE			
	ALL RACES	WHITE	BLACK	BLACK AND ALL OTHER RACES
1965	96.6	91.4	133.9	133.9
1966	91.3	86.4	125.7	125.9
1967	87.6	83.1	119.7	119.8
1968	85.7	81.5	114.0	114.9
1969	86.5	82.4	113.6	114.8
1970	87.9	84.1	115.4	113.0
1971	81.8	77.5	110.1	109.5
1972	73.4	69.2	100.5	100.3
1973	69.2	65.3	94.3	94.3
1974	68.4	64.7	90.8	91.0
1975	66.7	63.0	89.2	89.3
1976	65.6 **			

EXHIBIT 1-5

*Registered births per 1,000 women 15-44 years of age in specified groups.

**Provisional statistics.

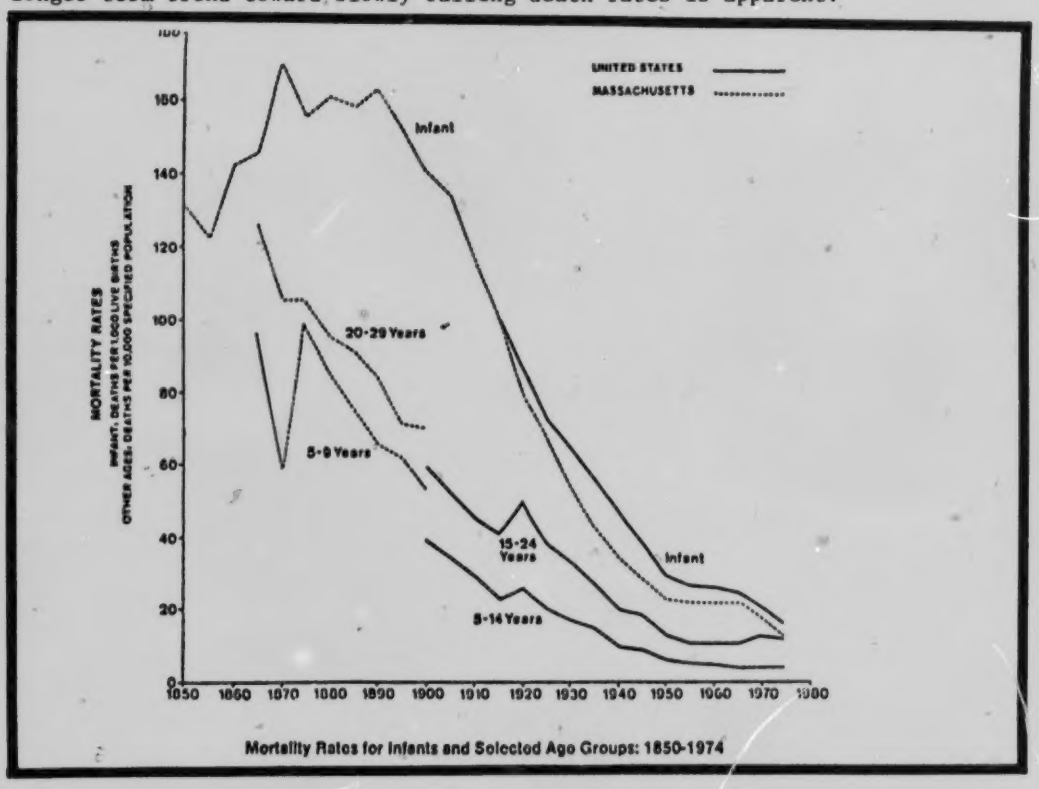
1965, 1966, 1968, 1969, 1970, and 1971 data are based upon 50 to 100 percent samples; data for 1967 are based upon 20 to 50 percent samples. 1970 to 1973 data exclude births to nonresidents of the United States.

Source: National Center for Health Statistics. Summary Report: Final Natality Statistics, 1973 (Monthly Vital Statistics Report, Volume 23, Number 11, Supplement (D) DHEW Publication No. (HRA)-75-1120), Washington, D.C., U.S. Government Printing Office, January 1975, Table 1; National Center for Health Statistics. Advance Report: Final Natality Statistics, 1974 (Monthly Vital Statistics Report, Volume 24, Number 11, Supplement 2, DHEW Publication No. (HRA)-70-1120), Washington, D.C., U.S. Government Printing Office, February 13, 1976, Table 1; National Center for Health Statistics. Advance Report: Final Natality Statistics, 1975 (Monthly Vital Statistics Report, Volume 25, Number 10, Supplement, DHEW Publication No. (HRA)-76-1120), Washington, D.C., U.S. Government Printing Office, December 30, 1976, Table 1; and unpublished data.

rates from the preceding year. This decline, from 66.7 to 65.6, is about the same as the decline between 1974 and 1975 and between 1973 and 1974. The decline in these one-year periods, however, is typically smaller than for earlier one-year periods; this corresponds to the leveling of the birth rate in the past few years, which was indicated in Exhibit 1-3.

Mortality Rates

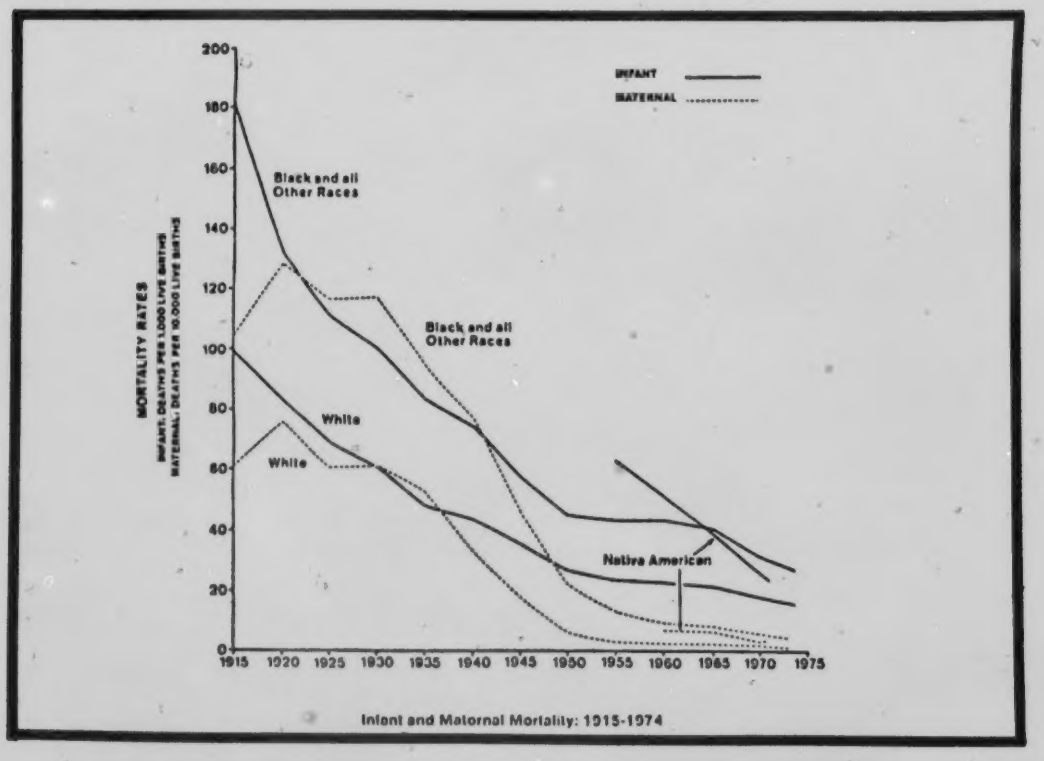
Another determiner of net population growth, death rate, is shown in Exhibit 1-3. Changes in recent years have been slightly erratic, although the longer-term trend toward slowly falling death rates is apparent.



Source: Snapper, Kurt J. "The American Legacy." In: Grotberg, Edith H., ed. 200 Years of Children. Washington: U.S. Department of Health, Education, and Welfare, Office of Child Development, 1976. (DHEW Publication No. (OHD) 77-30103) pp. 13-38.

EXHIBIT 1-6

Rates now are much lower than in earlier years, however. Exhibit 1-6 shows how infant mortality--an important determiner of overall mortality rates--has declined. (Estimates from earlier years are unreliable and only partially comparable with data from more recent years; thus, they should be regarded as only rough approximations. The oldest available data are for Massachusetts only; more recent Massachusetts data are included for comparison with U.S. data.) Exhibit 1-6 suggests that, by the end of the 1800s, there was a decline in mortality rates for infants and certain other age groups. When data became available for the United States overall, in the 1900s, the trend towards declining mortality rates was nation-wide--with dramatic decreases especially evident for infants.



Infant and Maternal Mortality: 1915-1974

Source: Snapper, Kurt J. "The American Legacy." In: Grotberg, Edith H., ed. 200 Years of Children. Washington: U.S. Department of Health, Education, and Welfare, Office of Child Development, 1976. (DHEW Publication No. (OHD) 77-30103) pp. 13-38.

EXHIBIT 1-7

Exhibit 1-7 provides an interesting comparison of infant and maternal mortality rates and trends. Apparently maternal mortality rates were high initially, and began to decline steadily about 1930--well after the apparent onset of the decline in infant mortality. While there are still differences in mortality rates (both infant and maternal) for different ethnic groups, rates for each are low compared to previous years.

A more detailed analysis of ethnic differences in infant and maternal mortality rates is possible using Exhibits 1-8 and 1-9. The data in Exhibit 1-8 reflect a very systematic decline in the infant mortality rate which, for the total population, is estimated as 15.1 in 1976. The rates shown in Exhibit 1-8 highlight the fact that infant mortality rates for nonwhites have fallen, but that they are lagging well behind those for whites. Rates for nonwhites are only now approaching those for whites during the early 1960s.

Maternal mortality rates, shown in Exhibit 1-9, indicate a trend similar to the trend in infant mortality. Declining maternal mortality rates since 1963 are evident for both whites and nonwhites, and, again, nonwhite mortality rates seem to lag well behind those for whites. However, substantial decreases in nonwhite maternal mortality rates are evident even into the 1970s; for example, the rate in 1970 was 55.9 and the rate in 1975 was 29.0--a decrease of nearly 50%.

Exhibit 1-10 provides a more general perspective on mortality rates and cause of death. For the total population (all age groups), there has been a modest decline in death rate; the decrease was from 943 to 915 deaths per 100,000 persons, between 1970 and 1974. For infants there was a decline in both the number of deaths and the death rate, which reflect the falling infant mortality rates discussed above. Thus, between 1970 and 1974, the decline in infant death rate was from 2,127 to 1,754 deaths per 100,000 children under one year of age. There was also a decline for young children

Infant Mortality Rates: 1963 to 1976*

Year	Race		
	All Races	White	Black and All Other Races
1963	25.2	22.2	41.5
1964	24.8	21.6	41.1
1965	24.7	21.5	40.3
1966	23.7	20.6	38.8
1967	22.4	19.7	35.9
1968	21.8	19.2	34.5
1969	20.9	18.4	32.9
1970	20.0	17.8	30.9
1971	19.1	17.1	28.5
1972	18.5	16.4	27.7
1973	17.7	15.8	26.2
1974	16.7	14.8	24.9
1975	16.1	14.2	24.2
1976	15.1**	(NA)	(NA)

* Deaths (under one year of age) per 1,000 live births in specified groups. 1974 data are based on 10 percent sample. Data for all other years based upon 100 percent sample.
** Provisional data.
NA: Not available.

Sources: National Center for Health Statistics. Annual Summary for the United States, 1975 (Provisional Statistics) Births, Deaths, Marriages, and Divorces (Monthly Vital Statistics Report Vol. 24, No. 13, DHEW Publication No. (HRA) 76-1120), Rockville, Maryland, June 30, 1976, Table F; and personal communication.

EXHIBIT 1-8

Maternal Mortality Rates: 1963 - 1976*

Year	Race		
	All Races	White	Black and All Other Races
1963	35.8	24.0	96.9
1964	33.3	22.3	89.9
1965	31.6	21.0	83.7
1966	29.1	20.2	72.4
1967	28.0	19.5	69.5
1968	24.5	16.6	63.6
1969	22.2	15.5	55.7
1970	21.5	14.4	55.9
1971	18.8	13.0	45.3
1972	18.8	14.3	38.5
1973	15.2	10.7	34.6
1974	14.6	10.0	35.1
1975	12.8	9.1	29.0
1976	(NA)	(NA)	(NA)

* Deaths per 100,000 live births in specified groups. Maternal deaths are those assigned to pregnancy complications, childbirth or puerperium according to the International Classification of Disease.
** Provisional Statistics.
NA: Not available.

Sources: National Center for Health Statistics. Vital Statistics of the United States, 1969, Volume III, Mortality Part A (HRA 74-1101), Washington, D.C.: U.S. Government Printing Office, 1974, Table 1.16; National Center for Health Statistics. Summary Report, Final Mortality Statistics, 1970 (Monthly Vital Statistics Report, Volume 22, No. 11, (HRA) 74-1120), Washington, D.C.: U.S. Government Printing Office, February 22, 1974, Table 7; National Center for Health Statistics. Summary Report, Final Mortality Statistics, 1971 (Monthly Vital Statistics Report, Volume 23, No. 3, (HRA 74-1120), Washington, D.C.: U.S. Government Printing Office, May 24, 1974, Table 7; National Center for Health Statistics. Summary Report, Final Mortality Statistics, 1972 (Monthly Vital Statistics Report, Volume 23, No. 8, (HRA) 75-1120), Washington, D.C.: U.S. Government Printing Office, May 24, 1974, Table 7; National Center for Health Statistics. Summary Report,

EXHIBIT 1-9

Final Mortality Statistics, 1973 (Monthly Vital Statistics Report, Volume 23, No. 11, (HRA) 75-1120), Washington, D.C.: U.S. Government Printing Office, January, 1975, Table 11; National Center for Health Statistics. Advance Report, Final Mortality Statistics, 1974 (Monthly Vital Statistics Report, Volume 24, No. 11, Supplement, (HRA) 76-1120), Rockville, Maryland, February 3, 1976, Table 11; National Center for Health Statistics. Advance Report, Final Mortality Statistics, 1975 (Monthly Vital Statistics Report, Volume 25, No. 11, Supplement, (HRA) 77-1120), Rockville, Maryland, February 11, 1977, Table 11; and personal communication.

EXHIBIT 1-9 (continued)

Leading Causes of Death Among Infants and Children: 1970, 1973, and 1974*

Age and Cause of Death	Number of Deaths and Death Rate by Year					
	1970		1973		1974	
	Number of Deaths	Death Rate	Number of Deaths	Death Rate	Number of Deaths	Death Rate
All Ages	1,921,031	943*	1,973,003	940	1,934,588	915
Heart disease	735,542	361	757,075	361	738,171	349
Cancer	330,730	130	351,055	167	360,472	171
Stroke	207,166	102	214,313	102	207,424	98
Accidents (total)	114,638	56	115,821	55	104,622	50
Motor-vehicle	54,633	27	55,511	26	46,402	22
Falls	16,926	8	16,506	8	16,339	8
Drowning	7,860	4	8,725	4	7,876	4
Fires, Burns	6,718	3	6,503	3	6,236	3
Other	28,501	14	28,576	14	27,769	13
Under 1 Year	74,667	2,127	55,581	1,805	52,776	1,754
Anoxia	19,963	569	14,582	474	13,724	456
Congenital Anomalies	11,259	321	8,953	291	8,607	286
Immaturity	8,752	249	5,369	174	4,719	157
Pneumonia	6,220	177	3,510	114	2,577	86
Complications of pregnancy, childbirth	10,473	298	7,368	239	7,054	234
Accidents (total)	2,294	65	1,691	55	1,453	48
Ingestion of food, object	705	20	485	16	442	15
Mechanical suffocation	567	16	336	11	285	9
Motor-vehicle	343	10	326	11	224	7
Fires, burns	135	4	154	5	136	5
Falls	135	4	94	3	87	3
Other	409	11	296	9	279	9
1 to 4 Years	11,548	85	10,843	80	9,831	74
Accidents (total)	4,300	32	4,346	32	3,882	29
Motor-vehicle	1,572	12	1,672	12	1,322	10
Drowning	800	6	860	6	850+	6

Continued on following page

EXHIBIT 1-10

Leading Causes of Death Among Infants and Children: 1970, 1973, and 1974* (continued)

Age and Cause of Death	Number of Deaths and Death Rate by Year					
	1970		1973		1974	
	Number of Deaths	Death Rate	Number of Deaths	Death Rate	Number of Deaths	Death Rate
Fires, burns	713	5	692	5	654	5
Falls	205	2	181	1	159	1
Ingestion of food, object	201	1	214	2	163	1
Other	809	6	727	6	734	6
Congenital anomalies	1,331	10	1,306	10	1,191	9
Cancer	1,027	8	869	6	785	6
5 to 14 Years	16,847	41	15,982	41	14,636	38
Accidents	8,203	20	8,102	21	7,037	18
Motor-vehicle	4,159	10	4,124	11	3,332	9
Drowning	1,550	4	1,580	4	1,320+	3
Fires, burns	609	1	526	1	569	1
Other	1,885	5	1,872	5	1,816	5
Cancer	2,429	6	2,092	5	2,001	5
Congenital Anomalies	901	2	842	2	818	2
15 to 24 Years	45,261	127	49,457	128	47,803	122
Accidents	24,336	68	26,550	69	24,200	62
Motor-vehicle	16,720	47	18,032	47	15,905	41
Drowning	2,330	7	2,610	7	2,390+	6
Poison (solid, liquid)	1,010	3	988	3	1,088	3
Firearms	726	2	845	2	832	2
Other	3,550	9	4,075	10	3,985	10
Homicide	4,157	12	5,182	13	5,577	14
Suicide	3,128	9	4,098	11	4,285	11

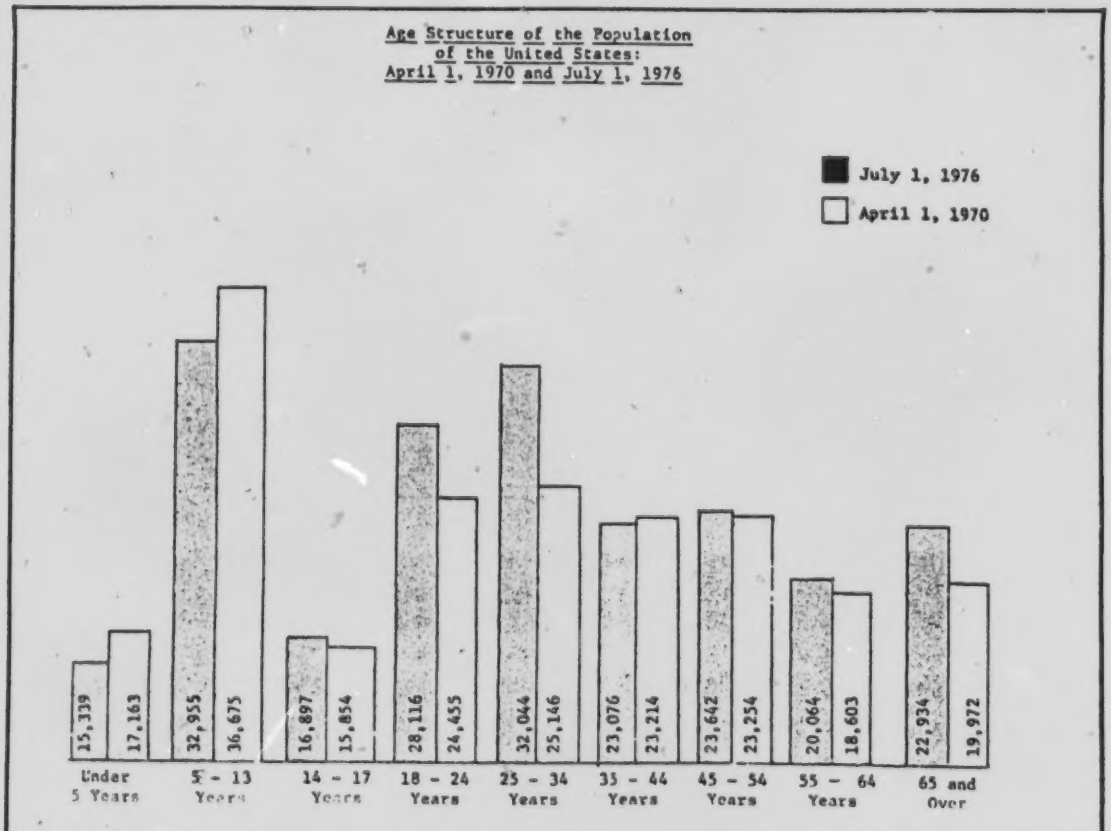
* Deaths per 100,000 persons in specified age groups. Rates are averages for age groups, not individual ages.
\+ Drowning data are based partially upon estimates.

Sources: National Safety Council, Accident Facts: 1973 Edition, Chicago, Illinois, 1973, pg. 8; National Safety Council, Accident Facts: 1974 Edition, Chicago, Illinois, 1974, pg. 8; National Safety Council, Accident Facts: 1975 Edition, Chicago, Illinois, 1975, pg. 8; and National Safety Council, Accident Facts: 1976 Edition, Chicago, Illinois, 1976, pg. 8.

ages 1-4; for that age group death rates declined from 85 to 74. Somewhat smaller decreases were also shown for the 5-14 age group (a decline from 41 to 38), and for the 15-24 age group (a decline from 127 to 122).

Age Structure of the Population

Both the decline in birth rates and the decline in mortality rates for the general population are reflected in the population age structure. These trends have been so strong that their effects on population structure are evident even with the 1970s, as indicated by Exhibit 1-11.



Source: Tabulated from U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 307, "Population Profile of the United States: 1976," U.S. Government Printing Office, Washington, D.C., 1977, Table 6.

EXHIBIT 1-11

In 1976, there were substantially fewer persons under 5, between 5 and 13, and between 14 and 17 than there were in 1970. Among the older age groups, especially above 65, there are more persons than in 1975. The largest increases, however, were for the groups 18-24 and 25-34, which roughly correspond to the "baby boom" population shown in Exhibit 1-4.

The adolescent population is of particular interest for several reasons (such as its over-representation in unemployment and crime rates) and it is important to examine that group in detail. There is a steady decrease in the number of adolescents in each age group below about age 15 as of 1976, according to the statistics in Exhibit 1-12. For example, there are about 4-1/4 million 15 year olds, but only about 3-3/4 million 10 year olds. As suggested, this decrease corresponds to the tailing off of the "baby boom" shown earlier in Exhibit 1-4, and can be expected to continue as long as there is no upward changes in fertility trends and rates.

Immigration

Although often overlooked, immigration is a component of growth in the population and has been historically important. In our nation's early years, for example, immigrants tended to settle in new territories, thereby fostering rapid territorial expansion. Exhibit 1-3 illustrated a slow rise in the rate of net civilian immigration, following the Great Depression. In more recent years, the number of immigrants per year has been very stable, about 400,000 per year, as indicated in Exhibit 1-13. Historically, however, there have been wide variations in the number of immigrants per year. The peak was in the early 1900s, with more than one million immigrants entering in one year, as shown in Exhibit 1-14.

Exhibit 1-14 also illustrates that the percentage of the total population comprised by immigrants has tended to fall. Nevertheless, immigration has been

Number and Percent of Adolescent Population of the United States by Age and Race: July 1, 1976*

Age	Race							
	Total		White		Black & Other Races		Black	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Ages	215,118	100.0	186,703	86.7	28,515	13.3	24,841	11.5
10-12 Years	11,534	5.4	9,636	4.5	1,898	.9	1,689	.8
10 Years	3,721	1.7	3,085	1.4	636	.3	562	.3
11 Years	3,808	1.8	3,187	1.5	621	.3	553	.3
12 Years	4,005	1.9	3,364	1.6	641	.3	574	.3
13-19 Years	29,503	13.7	23,955	11.6	4,549	2.1	4,053	1.9
13 Years	4,071	1.9	3,428	1.6	643	.3	577	.3
14 Years	4,213	2.0	3,547	1.6	666	.3	598	.3
15 Years	4,286	2.0	3,618	1.7	668	.3	596	.3
16 Years	4,184	1.9	3,534	1.6	651	.3	582	.3
17 Years	4,213	2.0	3,557	1.7	656	.3	584	.3
18 Years	4,253	2.0	3,621	1.7	632	.3	560	.3
19 Years	4,283	2.0	3,650	1.7	633	.3	556	.3
10-19 Years	41,038	19.1	34,591	16.1	6,447	3.0	5,742	2.7

*Sum of parts may not equal due to rounding.

Includes Armed Forces overseas.

Tabulations based on U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 643, "Estimates of the Population of the United States, by Age, Sex, and Race: July 1, 1974 to 1976," U.S. Government Printing Office, Washington, D.C., 1977, pg. 7.

EXHIBIT 1-12

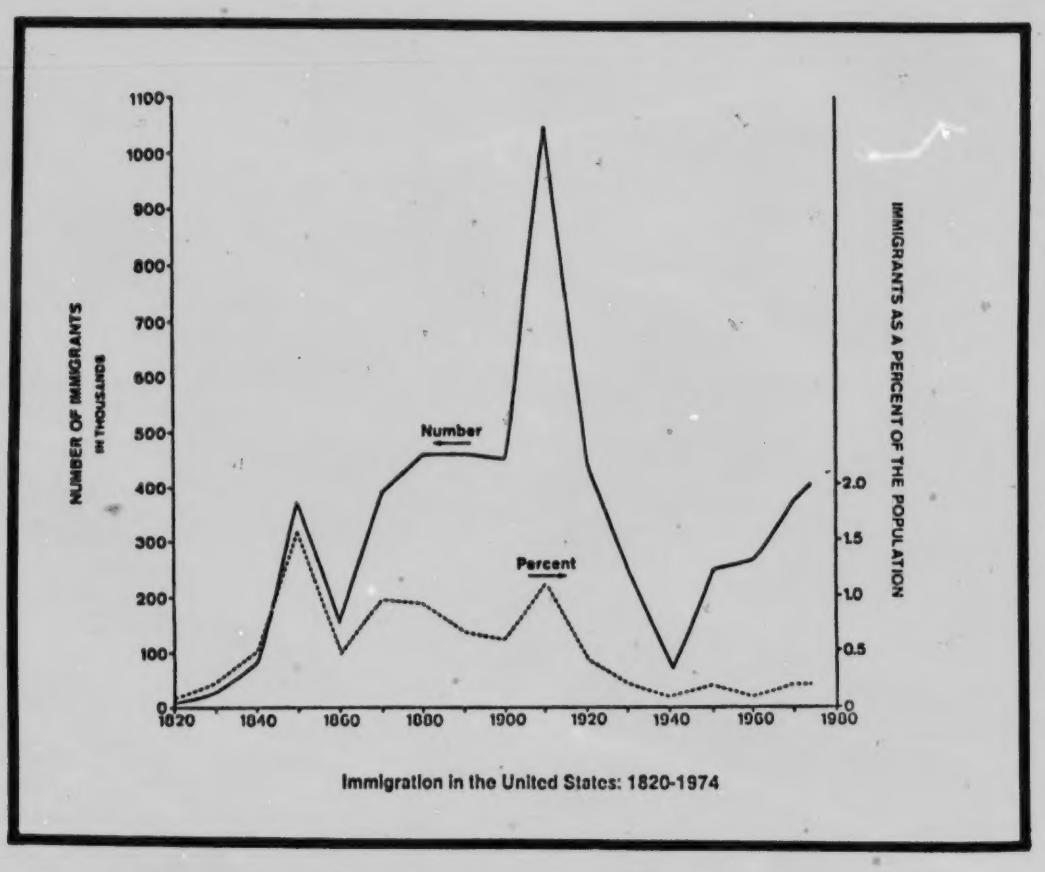
Number of Immigrants Admitted to the United States by Region of Birth: 1973-1976

REGION OF BIRTH	YEAR AND NUMBER ADMITTED			
	YEAR ENDING JUNE 30, 1973: NUMBER ADMITTED	YEAR ENDING JUNE 30, 1974: NUMBER ADMITTED	YEAR ENDING JUNE 30, 1975: NUMBER ADMITTED	YEAR ENDING JUNE 30, 1976: NUMBER ADMITTED
TOTAL				
ALL COUNTRIES	400,063	394,861	386,194	398,613
EUROPE	92,870	81,212	73,996	72,411
ASIA	124,160	130,662	132,469	149,881
AFRICA	6,655	6,182	6,729	7,723
OCEANIA	3,255	3,052	3,347	3,591
NORTH AMERICA	152,788	151,444	146,668	142,307
SOUTH AMERICA	20,335	22,307	22,984	22,699

Sources: Immigration and Naturalization Service. 1973 Annual Report of the Immigration and Naturalization Service, Washington, D.C.: U.S. Government Printing Office, 1973, Table 6; Immigration and Naturalization Serivce. 1974 Annual Report: Immigration and Naturalization Service, Washington, D.C.: U.S. Government Printing Office, 1974, Table 6; Immigration and Naturalization Service. 1975 Annual Report: Immigration and Naturalization Service, Washington, D.C.: U.S. Government Printing Office, 1975, Table 6; and personal communication.

EXHIBIT 1-13

and continues to be a significant component of population growth; it is especially interesting in relation to the issue of zero population growth because, if the birth rate is near the "replacement level," immigration can be a source of net growth in the population.



Source: Snapper, Kurt J. "The American Legacy." In: Grotberg, Edith H., ed. 200 Years of Children. Washington: U.S. Department of Health, Education, and Welfare, Office of Child Development, 1976. (DHEW Publication No. (OHD) 77-30103) pp. 13-38.

EXHIBIT 1-14

CHAPTER 2: CHANGES IN THE FAMILY

The trends described in the preceding chapter are associated with some important changes in the family, and have a variety of implications for children. Falling birth rates, for example, are associated with the deferral of marriage, deferral of children, or both. Some couples decide not to have children, and many couples who are having children will have one or two only. Other factors are also affecting the family, and are reflected in changes in the family structure, family socio-economic status, and, ultimately, in the well-being of children.

Marriage and Divorce Rates

In describing factors which affect families and children, divorce and marriage rates are especially important. Divorce rates, for example, have led to marked changes in the family structure and a rise in the number of single-parent families. While the number of single-parent families is rising, there has been little decline in the marriage rate--in part because it is bouyed up by remarriages involving divorced persons.

The decline in marriage rates is not part of a long-term or strong trend, as indicated by Exhibit 2-1. The decline in marriage rates has been consistent only during the 1970s, dropping from 10.6 to 9.9 marriages per 1,000 population between 1970 and 1976. Despite the decline, the rate in 1976 is actually higher than some recorded during the 1960s.

In contrast, the increasing divorce rate does reflect a strong, long-term trend. Divorce rates for selected years between 1946 and 1976

Marriages and Marriage Rates: 1966-1976

Year	Number and Rate	
	Marriage Rate per 1,000 Pop.	Number of Marriages
1966	9.5	1,857,000
1967	9.7	1,927,000
1968	10.4	2,069,000
1969	10.6	2,145,000
1970	10.6	2,158,802
1971	10.6	2,190,481
1972	11.0	2,282,154
1973	10.9	2,284,108
1974	10.5	2,229,667
1975	10.1	2,152,662
1976	9.9*	2,133,000*

*Provisional Data

Sources: National Center for Health Statistics. Advance Report, Final Marriage Statistics, 1974 (Monthly Vital Statistics Report, Volume 25, No. 2, Supplement, DHEW Publication No. (HRA) 76-1120), Rockville, Maryland, May 5, 1976, Table 2; National Center for Health Statistics. Annual Summary for the United States, 1974 (Provisional Statistics) Births, Deaths, Marriages and Divorces (Monthly Vital Statistics Report, Volume 24, No. 13, DHEW Publication No. (HRA) 76-1120), Rockville, Maryland, June 30, 1976, page 12; National Center for Health Statistics. Advance Report, Final Marriage Statistics, 1975 (Monthly Vital Statistics Report, Volume 26, No. 2, Supplement), Rockville, Maryland, 1977, Table 2; and personal communication.

EXHIBIT 2-1

are shown in Exhibit 2-2. 1946 is included because that year had the highest pre-1970 divorce rate. After 1946 there was a temporary decline in the divorce rate, followed by a steady rise. The 1946 divorce rate has been exceeded consistently since 1973, and the rate for 1976, 5.0 divorces per 1,000 population, is the all-time high.

Statistics about divorce rates become more significant when their implications for children are examined. Despite falling birth rates, the number of children involved in divorces and annulments has increased year-by-year. Exhibit 2-3 reflects the consistency of this trend, and shows that the number of children involved annually has approximately doubled since 1963. Thus, in 1975, more than one million children were involved in divorces and annulments.

Family Structure

Changes in the family structure are associated with both decreased marriage rates and increased divorce rates. Overall, there has been a decrease in the percentage of families headed by a husband and a wife; the decrease in husband-wife families, between 1970 and 1976, was from 86.8% to 84.1%. This decrease was accompanied by a corresponding increase in the percentage of female-headed families and a smaller increase in the percentage of male-headed families.

The extent of these changes in family structure are shown in Exhibit 2-4. Overall, there was an increase in female-headed families from 10.8% to 13.3%, and in male-headed families from 2.4% to 2.6%. Exhibit 2-4 suggests that these trends, while occurring for both whites and blacks, are more pronounced among the latter. This can be illustrated by the fact that the percentage of black families headed by females is about three times

Divorce Rates: 1946, 1962, and 1969-1976

Year	Divorce Rates	
	Per 1,000 Total Population	Per 1,000 Married Women
1946	4.3*	17.9
1962	2.2	9.4
1969	3.2	13.4
1970	3.5	14.9
1971	3.7	15.8
1972	4.1	17.0
1973	4.4	18.2
1974	4.6	19.3
1975	4.9	20.3
1976	5.0	**

*Former all time high

**Not yet available

Sources: National Center for Health Statistics. Summary Report, Final Divorce Statistics, 1971 (Monthly Vital Statistics Report, Volume 23, No. 8, DHEW Publication No. (HRA) 75-1120), Rockville, Maryland, November 6, 1974, Table 2; National Center for Health Statistics. Summary Report, Final Divorce Statistics, 1972 (Monthly Vital Statistics Report, Volume 23, No. 12 (2) (HRA) 75-1120), Rockville, Maryland, March 1975, Table 2; National Center for Health Statistics. Advance Report, Final Divorce Statistics, 1974 (Monthly Vital Statistics Report, Volume 25, No. 1, Supplement, (HRA) 76-1120), Rockville, Maryland, April 14, 1976, Table 2; National Center for Health Statistics. Provisional Statistics, Births, Marriages, Divorces, and Deaths for 1975 (Monthly Vital Statistics Report, Volume 24, No. 12, (HRA) 76-1120), Rockville, Maryland, March 4, 1976, Table 3; National Center for Health Statistics. Provisional Statistics, Births, Marriages, Divorces, and Deaths for 1976 (Monthly Vital Statistics Report, Volume 25, No. 12 (HRA) 77-1120), Rockville, Maryland, March 8, 1977, Table 3; and personal communication.

EXHIBIT 2-2

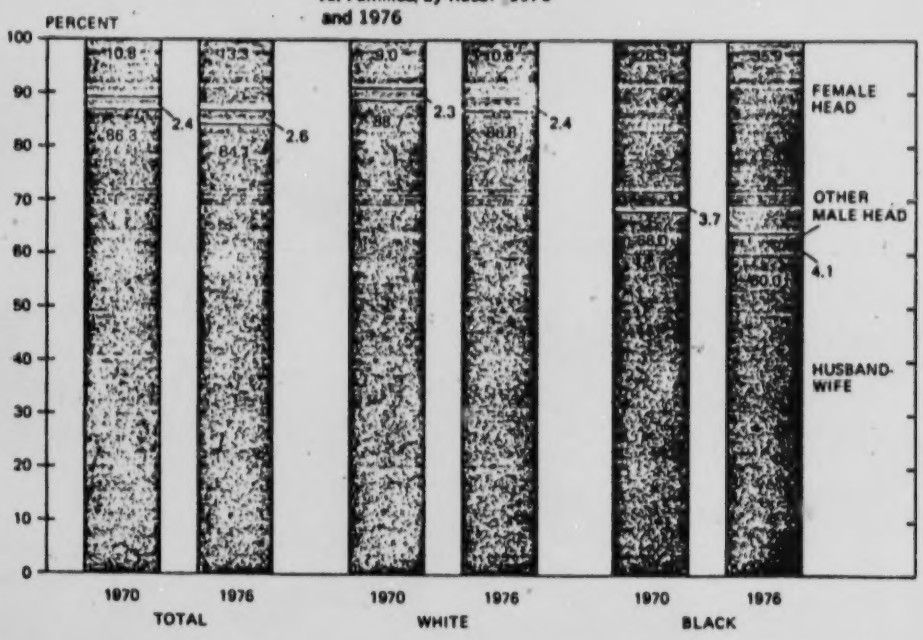
Number of Divorces and Annulments and Estimated Number of Children Involved: 1963 to 1976*

Year	Divorces and Annulments, and Involved Children	
	Number of Divorces and Annulments	Number of Involved Children
1963	428	562
1964	450	613
1965	479	630
1966	499	669
1967	523	701
1968	584	784
1969	639	840
1970	708	870
1971	773	946
1972	845	1,021
1973	915	1,079
1974	977	1,099
1975	1,036	1,123
1976	1,077	(NA)

*Numbers in thousands
NA: Not available.
Number of children involved is estimated from frequencies based upon a sample.

Sources: National Center for Health Statistics. Summary Report, Final Divorce Statistics, 1971. (Monthly Vital Statistics Report, Volume 23, No. 8, DHEW Publication No. (HRA) 75-1120), Rockville, Maryland, November 6, 1974, Tables 2 and 4; National Center for Health Statistics. Summary Report, Final Divorce Statistics, 1972 (Monthly Vital Statistics Report, Volume 23, No. 12(2) (HRA) 75-1120), Rockville, Maryland, March 1975, Tables 2 and 4; National Center for Health Statistics. Provisional Statistics, Annual Summary for the United States, 1974 (Monthly Vital Statistics Report, Volume 23, No. 13), Rockville, Maryland, May 30, 1975, Table K; National Center for Health Statistics. Advance Report, Final Divorce Statistics, 1974 (Monthly Vital Statistics Report Volume 25, No. 1, Supplement, DHEW Publication No. (HRA) 75-1120), Rockville, Maryland, April 14, 1976, Tables 2 and 4; National Center for Health Statistics. Provisional Statistics, Births, Marriages, Divorces, and Deaths for 1975 (Monthly Vital Statistics Report, Volume 24, No. 12, DHEW Publication No. (HRA) 76-1120), Rockville, Maryland, March 4, 1976, Table 3; National Center for Health Statistics. Provisional Statistics, Births, Marriages, Divorces, and Deaths for 1976 (Monthly Vital Statistics Report, Volume 25, No. 12, DHEW Publication No. (HRA) 77-1120), Rockville, Maryland, March 8, 1977, Table 3.

EXHIBIT 2-3



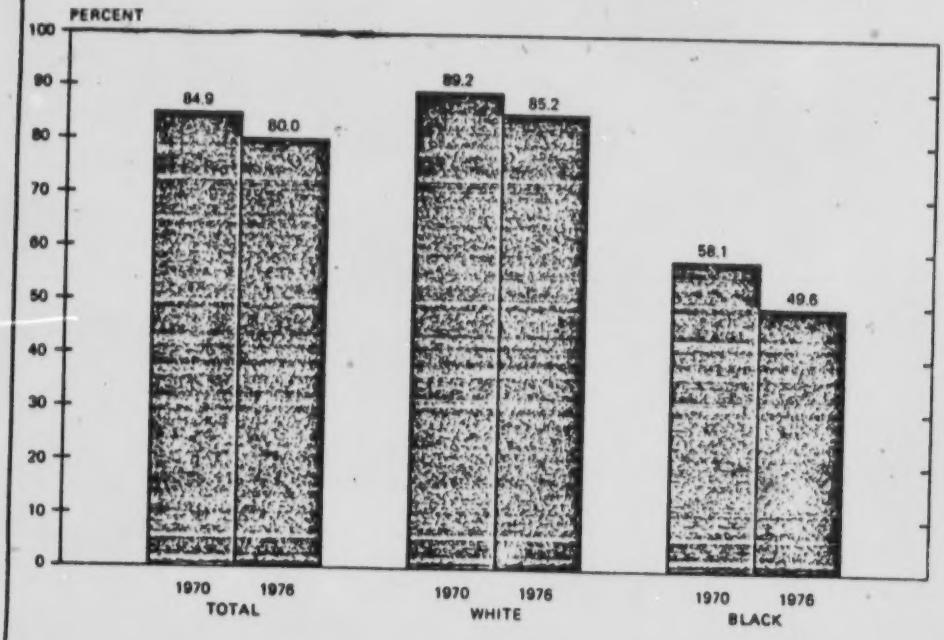
Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C.: U.S. Government Printing Office, September 1976, page 7.

EXHIBIT 2-4

as large as the percentage of white families headed by females. The decline in the percentage of husband-wife families, between 1970 and 1976, has been from 88.7% to 86.8% for whites, and from 68.0% to 60.0% for blacks.

A more salient statistic, in terms of children and youth, is the percentage and number of children living in each type of family. Exhibit 2-5 shows the percentage of children under 18 who live with both parents. By 1970, the overall percentage of children living with both parents had decreased to about 85%; it fell further to 80% in 1976. The relative percentages of single-parent families among blacks and whites are reflected in Exhibit 2-5, which indicates that the percentage of children living with both parents is smaller for blacks than for whites. The decline for

EXHIBIT 2-5



Persons Under 18 Years Living with Both Parents, by Race: 1970 and 1976

Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C.: U.S. Government Printing Office, September 1976, page 8.

whites was from 89.2% to 85.2%; for blacks, the decline was from 58.1% to 49.6%.

The living arrangements of children are shown in more detail in Exhibit 2-6. The data suggest that about 10% of the children under 3, as compared to more than 15% of all children under 18, were not living in families with both parents present in 1976. The tendency for older children to be less likely than young children to live with both parents is evident for families of Spanish origin, white families overall, and for black families. Divorce is one reason why older children may be less likely to live with both parents; parents often obtain divorces only after several years of marriage, and may intentionally defer divorce until the children are older.

Number and Percent Children Under 18 Years Old Living with Both Parents by Age and Race: 1971-1976*

Race of Family and Children's Age	March 1971			March 1972			March 1973		
	Total	Husband-Wife Families	Percent Husband-Wife Families	Total	Husband-Wife Families	Percent Husband-Wife Families	Total	Husband-Wife Families	Percent Husband-Wife Families
All Families...									
Total Members under 18	70,011	60,010	85.7	68,663	58,540	85.2	67,835	57,268	84.4
Total own children under 18	66,532	58,015	87.2	65,260	56,625	86.8	64,311	55,238	85.9
Total own children under 6	19,909	17,821	89.5	19,238	17,173	89.3	19,147	16,904	88.3
Total own children under 3	9,769	8,877	90.9	9,655	8,772	90.8	9,483	8,521	89.8
White Families...									
Total members under 18	59,191	53,239	89.9	58,290	52,088	89.4	57,394	51,155	89.1
Total own children under 18	57,303	51,960	90.7	56,303	50,796	87.1	55,233	49,712	90.0
Total own children under 6	17,030	15,797	92.7	16,603	15,409	92.8	16,419	15,211	92.6
Total own children under 3	8,401	7,885	93.8	8,344	7,860	94.2	8,108	7,628	94.1
Black Families...									
Total members under 18	9,883	5,956	60.3	9,431	5,650	59.9	9,451	5,343	56.5
Total own children under 18	8,383	5,309	63.3	8,100	5,079	62.7	8,144	4,798	58.9
Total own children under 6	2,599	1,768	68.0	2,346	1,504	64.1	2,397	1,416	59.1
Total own children under 3	1,219	852	69.9	1,172	788	67.2	1,210	742	61.3
Families of Spanish Origin...									
Total members under 18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 18	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 3	NA	NA	NA	NA	NA	NA	NA	NA	NA

Number and Percent Children Under 18 Years Old Living With Both Parents by Age and Race: 1971-1976* (continued)

Race of Family and Children's Age	March 1974			March 1975			March 1976		
	Total	Husband-Wife Families	Percent Husband-Wife Families	Total	Husband-Wife Families	Percent Husband-Wife Families	Total	Husband-Wife Families	Percent Husband-Wife Families
All Families...									
Total members under 18	66,850	55,927	83.6	65,982	54,361	82.4	64,924	53,366	82.2
Total own children under 18	63,556	54,162	85.2	62,733	52,611	83.9	61,697	51,586	83.6
Total own children under 6	18,510	16,308	88.1	18,150	15,687	86.4	17,639	15,332	86.9
Total own children under 3	8,709	7,841	90.0	8,400	7,453	88.7	8,246	7,374	89.4
White Families...									
Total members under 18	56,415	49,821	88.3	55,498	48,291	87.0	54,266	47,181	86.9
Total own children under 18	54,515	48,598	89.1	53,608	47,086	87.8	52,441	45,979	87.7
Total own children under 6	15,906	14,614	91.9	15,550	14,008	90.1	15,033	13,650	90.8
Total own children under 3	7,526	7,033	93.4	7,256	6,674	92.0	7,068	6,577	93.0
Black Families...									
Total members under 18	9,420	5,257	55.8	9,403	5,105	54.3	9,422	5,109	54.2
Total own children under 18	8,069	4,743	58.8	8,095	4,598	56.8	8,123	4,595	56.6
Total own children under 6	2,259	1,379	61.0	2,276	1,377	60.5	2,221	1,326	59.7
Total own children under 3	1,018	644	63.3	993	632	63.6	992	619	62.4
Families of Spanish Origin...									
Total members under 18	NA	NA	NA	NA	NA	NA	4,427	3,349	75.6
Total own children under 18	NA	NA	NA	NA	NA	NA	4,146	3,182	76.7
Total own children under 6	NA	NA	NA	NA	NA	NA	1,397	1,124	80.4
Total own children under 3	NA	NA	NA	NA	NA	NA	684	569	83.2

EXHIBIT 2-6 (Continued)

*Numbers in thousands. Excludes inmates of institutions. Includes 914,000 Armed Force members who were living off post, or on post with families. Excludes all other Armed Force members.
NA: Not available.

Sources: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 311, "Household and Family Characteristics: March 1976," U.S. Government Printing Office, Washington, D.C., 1977, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 291, "Household and Family Characteristics: March 1975," U.S. Government Printing Office, Washington, D.C., 1976, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 276, "Household and Family Characteristics: March 1974," U.S. Government Printing Office, Washington, D.C., 1975, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 258, "Household and Family Characteristics: March 1973," U.S. Government Printing Office, Washington, D.C., 1974, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 246, "Household and Family Characteristics: March 1972," U.S. Government Printing Office, Washington, D.C., 1973, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 233, "Household and Family Characteristics: March 1971," U.S. Government Printing Office, Washington, D.C., 1972, Table 1.

EXHIBIT 2-6 (Continued)

Income and Employment

The statistics regarding family structure and living arrangements of children are particularly interesting when examined in light of family income. Exhibit 2-7 shows that incomes of female-headed families (regardless of ethnicity) are below those of husband-wife families. There are also differences associated with ethnicity. Thus, the income of white, male-headed families is roughly triple that of black, female-headed families, double that of white, female-headed families, and one-third higher than that of black husband-wife families.

Another important factor in assessing the economic status of families is unemployment, which has continued to be problematic despite the official end of the recession. Exhibit 2-8 shows that unemployment rose sharply,

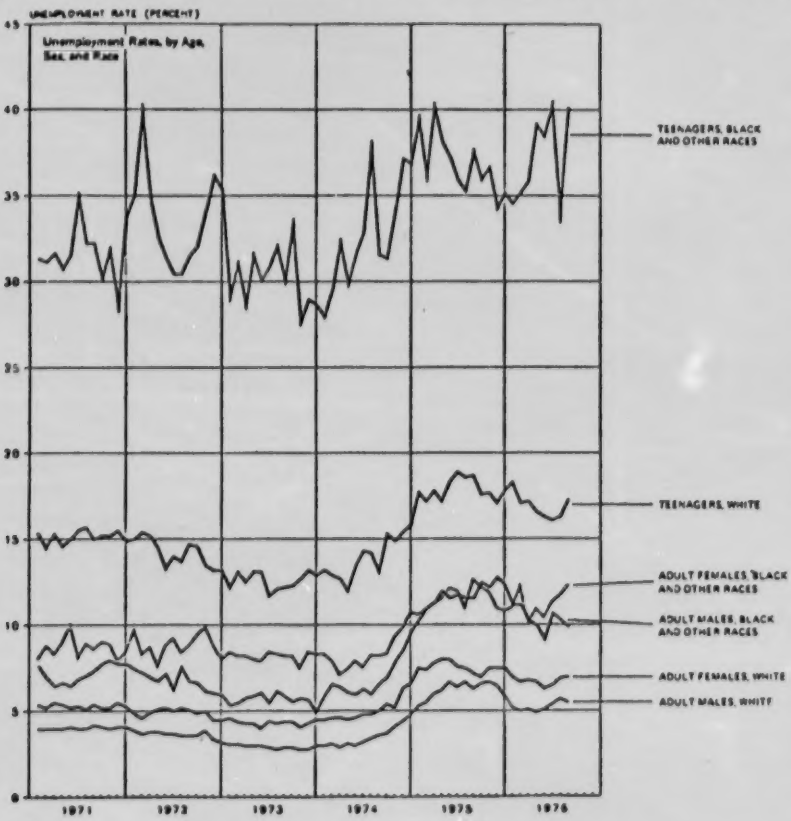


EXHIBIT 2-8

Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C.: U.S. Government Printing Office, August 1976, page 15.

Median Family Income by Residence, Type of Family, and Race: 1970, 1973, 1974 and 1975*

Year and Race	Characteristics						
	Residence			Type of Family			
	Total	Inside Metro Area	Outside Metro Area	Total	Male-** Headed	Female-Headed	Husband-Wife
1970...							
All Families	$9,867	$10,789	$8,348	$9,867	$10,480	$5,093	$10,516
White	$10,236	$11,203	$8,661	$10,236	$10,697	$5,754	$10,723
Black	$6,279	$7,140	$4,397	$6,279	$7,766	$3,576	$7,816
1973...							
All Families	$12,051	$12,961	$10,366	$12,051	$12,965	$5,797	$13,028
White	$12,595	$13,566	$10,788	$12,595	$13,253	$6,560	$13,297
Black	$7,269	$7,779	$5,780	$7,269	$9,549	$4,226	$9,729
1974...							
All Families	$12,836	$13,771	$11,045	$12,836	$13,788	$6,413	$13,847
White	$13,356	$14,377	$11,045	$13,356	$14,055	$7,363	$14,099
Black	$7,808	$8,489	$6,136	$7,808	$10,365	$4,465	$10,530
1975...							
All Families	$13,719	$14,909	$11,600	$13,719	$14,816	$6,844	$14,867
White	$14,268	$15,548	$12,020	$14,268	$15,094	$7,651	$15,125
Black	$8,779	$9,494	$6,684	$8,779	$11,389	$4,898	$11,526

*Excludes inmates of institutions. Includes Armed Forces members who were living off post, or on post with families; excludes all other Armed Forces members.
**Includes male head married, wife present and male head, other marital status.

Sources: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 80, "Income in 1970 of Families and Persons in the United States," U.S. Government Printing Office, Washington, D.C., 1971,

Tables 16 and 17; U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 97, "Money Income in 1973 of Families and Persons in the United States," U.S. Government Printing Office, Washington, D.C., 1975, Tables 24 and 25; U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 101, "Money Income in 1974 of Families and Persons in the United States," U.S. Government Printing Office, Washington, D.C., 1976, Tables 24 and 25; U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 105, "Money Income in 1975 of Families and Persons in the United States," U.S. Government Printing Office, Washington, D.C., 1977, Tables 15 and 20.

EXHIBIT 2-7 (Continued)

especially near the end of 1974, and, despite a slow fall since then, has remained high. Among the adults, unemployment rates have been relatively high for both black males and females, as compared to whites.

Exhibit 2-8 also illustrates some trends in teenage unemployment, which has typically been high compared to other segments of the labor force. Recently, when unemployment rates for black youth again reached 40%, renewed concern was expressed about the problem of high unemployment among youth. Exhibit 2-8 shows that the rate of unemployment is greatest among black and other non-white groups, and is roughly double that of white youth.

Despite the recession and continued high unemployment, labor force participation rates have increased rather steadily for women, including those with children and husband present. (Labor force participation means that a person is seeking a job, not necessarily that he or she has or will find employment.) Exhibit 2-9 shows that there has been a slight increase between 1963 and 1976 in the labor force participation rates of wives with no children under 18; rates have increased from 37.4% to 43.8%. The rate for women with no children under 18 has been exceeded, however, for three consecutive years (1974-1976) by the participation rates for wives who do have children under 18. The largest increase in participation rate is for mothers with children under 6, and, perhaps more surprisingly, for mothers with children under 3. For wives with children under 3, labor force participation rates have increased between 1963 and 1976 from 19.4% to 32.4%--an increase of more than one-half. Rates for mothers with children under 6 increased by a similar amount over this period, from 22.5% to 37.4%.

Exhibit 2-10 shows labor force participation rates for white and nonwhite women. Participation rates for nonwhite wives with children under 6 have been higher than rates for white wives with children under 6; between 1970 and 1976 the increase in rate for nonwhites was from 46.9% to 53.2%,

Labor Force Participation Rates of Married Women with Children, Husband Present: 1963 to 1976*

Year	Wives With No Children Under 18 Years Old	Wives With Children Under 3 Years Old	Wives With Children Under 6 Years Old	Wives With Children 6-17 Years Old	Wives With Children Under 18 Years Old
1963	37.4	19.4	22.5	41.5	31.2
1964	37.8	20.5	22.7	43.0	32.0
1965	38.3	20.0	23.3	42.7	32.2
1966	38.4	21.2	24.2	43.7	33.2
1967	38.9	23.3	26.5	45.0	35.3
1968	40.1	23.4	27.6	46.9	36.9
1969	41.0	24.2	28.5	48.6	38.6
1970	42.2	25.8	30.3	49.2	39.7
1971	42.1	25.7	29.6	49.4	39.7
1972	42.7	26.9	30.1	50.2	40.5
1973	42.8	29.4	32.7	50.1	41.7
1974	43.0	31.0	34.4	51.2	43.1
1975	43.9	32.7	36.6	52.3	44.9
1976	43.8	32.4	37.4	53.7	46.1

*Percent in specified groups.
Data are for married women with children, husband present.

Sources: Bureau of Labor Statistics. Marital and Family Characteristics of the Labor Force in March 1973 (Special Labor Force Report 164), Washington, D.C.: U.S. Government Printing Office, 1974, Table 3; Bureau of Labor Statistics. Marital and Family Characteristics of the Labor Force in March 1974 (Special Labor Force Report 173), Washington, D.C.: U.S. Government Printing Office, 1975, Table 2; Bureau of Labor Statistics. Marital and Family Characteristics of the Labor Force in March 1975 (Special Labor Force Report 183), Washington, D.C.: U.S. Government Printing Office, 1976, Table E; and personal communication.

EXHIBIT 2-9

Labor Force Participation Rates of Married Women with Children by Race: 1970, 1973, and 1976*

YEAR AND RACE	PRESENCE AND AGE OF CHILDREN			
	ALL WIVES	WIVES WITH NO CHILDREN UNDER 18 YEARS OLD	WIVES WITH CHILDREN UNDER 6 YEARS OLD	WIVES WITH CHILDREN 6-17 YEARS OLD ONLY
1970				
WHITE	39.7	41.5	28.4	48.1
BLACK AND ALL OTHER RACES	52.5	50.9	46.9	62.6
1973				
WHITE	41.2	42.4	30.5	49.2
BLACK AND ALL OTHER RACES	53.9	48.9	53.7	61.0
1976				
WHITE	44.1	43.4	35.5	42.7
BLACK AND ALL OTHER RACES	54.9	50.0	53.2	63.8

*Percent in specified groups.
Data are for married women with husband present.

Sources: Bureau of Labor Statistics. Marital and Family Characteristics of Workers, March 1970 (Special Labor Force Report 130), U.S. Government Printing Office, Washington, D.C., 1971, Table J; Bureau of Labor Statistics. Marital and Family Characteristics of the Labor Force, March 1973 (Special Labor Force Report 164), U.S. Government Printing Office, Washington, D.C., 1974, Table J; and Bureau of Labor Statistics. Monthly Labor Review, Volume 100, No. 6, June 1977, U.S. Government Printing Office, Washington, D.C., pp. 41-44.

EXHIBIT 2-10

and for white wives the increase was from 28.4% to 36.5%. Thus, both white and nonwhite wives with children under 6 have shown a 6-7% increase in labor force participation rates. In contrast, labor force participation rates have remained fairly steady for wives who have no children under 18 or who have children between the ages of 6 and 17.

Exhibit 2-11 also shows that the labor force participation rate of women is increasing, but further suggests that this increase is occurring in families which vary by the husband's income. For example, among wives whose husband's income was less than $3,000 the labor force participation rate increased from 34.9% (in 1970) to 40.8% (in 1976); for incomes above $10,000 there was also an increase, from 36.0% to 45.9%. Much the same pattern holds irrespective of the presence of young children. For wives with children under six, whose husband's income was less than $3,000, the increase has been from 31.7% to 44.0%; and for incomes above $10,000 the increase has been from 21.4% to 33.5%.

While very substantial differences in income exist between ethnic groups, as previously indicated by Exhibit 2-7, modest income gains among non-whites have been made. This is reflected in Exhibit 2-12, which shows an index of median incomes for whites and for blacks and other non-whites. While large differences in income between groups do remain, the tendency has been for non-white median incomes to increase somewhat more rapidly than median incomes for whites. It is particularly interesting to note that the increase for non-whites in the middle 1960s has tended to carry over into the mid 1970s.

A related phenomenon is shown in Exhibit 2-13, which indicates poverty rates by year for children from different ethnic groups. The poverty rate for children overall, irrespective of ethnicity, showed a drop from a high of 22.8% (in 1963) to a low of 13.8% in 1969; between 1969 and 1975 there was an increase in the overall poverty rate for children, which stood at 16.8% in 1975.

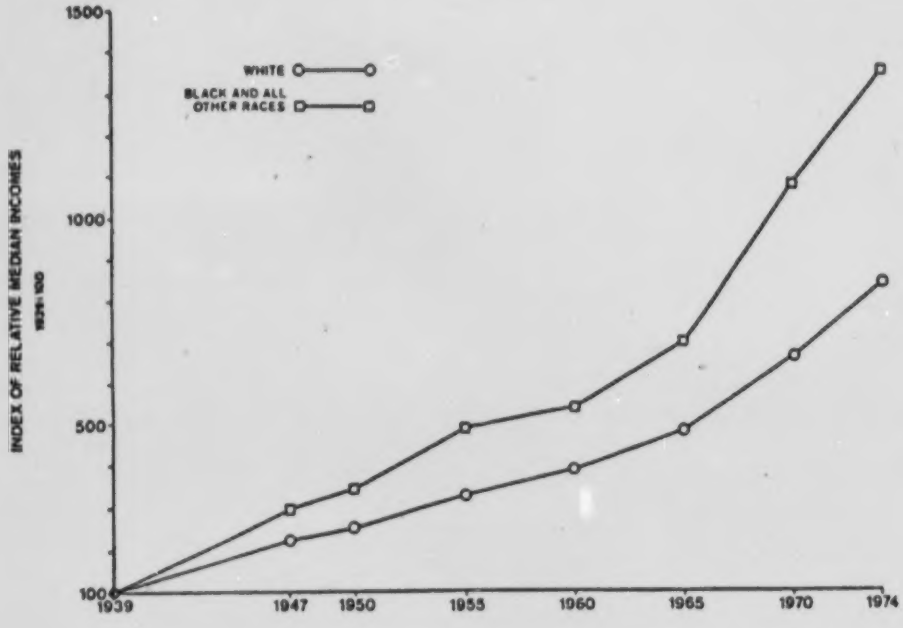
Labor Force Participation Rates of Married Women with Children by Husband's Income and Age of Children: 1970, 1973, and 1976*

YEAR AND HUSBAND'S INCOME	PRESENCE AND AGE OF CHILDREN			
	ALL WIVES	WIVES WITH NO CHILDREN UNDER 18 YEARS OLD	WIVES WITH CHILDREN UNDER 6 YEARS OLD	WIVES WITH CHILDREN 6-17 YEARS OLD ONLY
1970 (1)				
Under $3,000	34.9	32.1	31.7	54.7
$3,000-$4,999	41.0	38.4	37.5	53.7
$5,000-$6,999	46.3	49.8	36.0	54.4
$7,000-$9,999	45.8	49.8	33.4	54.7
$10,000 & OVER	36.0	42.5	21.4	41.9
1973 (2)				
Under $3,000	36.8	32.5	44.6	50.9
$3,000-$4,999	38.2	34.9	35.7	55.4
$5,000-$6,999	44.7	43.4	38.6	57.1
$7,000-$9,999	48.8	52.0	37.8	56.8
$10,000 & OVER	40.7	46.1	26.3	46.1
1976 (3)				
Under $3,000	40.8	36.0	44.0	56.5
$3,000-$4,999	37.9	33.0	43.6	54.3
$5,000-$6,999	41.3	33.9	40.8	58.3
$7,000-$9,999	50.0	49.0	45.0	60.2
$10,000 & OVER	45.9	49.1	33.5	51.8

*Labor force as percent of population.
(1) Income of husband in 1969.
(2) Income of husband in 1972.
(3) Income of husband in 1975.

Sources: Bureau of Labor Statistics. Marital and Family Characteristics of Workers, March 1970 (Special Labor Force Report 130), U.S. Government Printing Office, Washington, D.C., 1971, Table J; Bureau of Labor Statistics. Marital and Family Characteristics of the Labor Force, March 1973 (Special Labor Force Report 164), U.S. Government Printing Office, Washington, D.C., 1974, Table J; and Bureau of Labor Statistics. Monthly Labor Review, Volume 100, No. 6, June 1977, U.S. Government Printing Office, Washington, D.C., pp. 41-44.

EXHIBIT 2-11



Index of Median Incomes of Families and Unrelated Individuals: 1939-1974

Source: Snapper, Kurt J. "The American Legacy." In: Grotberg, Edith H., ed. 200 Years of Children. Washington: U.S. Department of Health, Education, and Welfare, Office of Child Development, 1976. (DHEW Publication No. (OHD) 77-30103) pp. 13-38.

EXHIBIT 2-12

The data in Exhibit 2-13 show that the poverty rate for children in nonwhite groups has declined from 60.9% (in 1963) to 38.9% (in 1975). Rates for nonwhite children in the 1970s have been fairly stable, at about 39%. Although data are not tabulated separately for blacks prior to 1966, data for 1966 through 1975 indicate a drop in the poverty rate for children from 50.6% to 41.4%. The poverty rate for black children has remained fairly stable in the 1970s, though somewhat higher than the poverty rate for nonwhite groups overall. In contrast, the poverty rate for the Spanish-origin group has shown a tendency to rise in the 1970s, from 27.8% in 1973 (the first year for which data are available) to 33.1% in 1975.

Number and Percent of Children Under 18 Years Old in Families Below the Poverty Level by Race: 1963-1976*

YEAR	RACE									
	ALL RACES		WHITE		BLACK		SPANISH ORIGIN		BLACK AND ALL OTHER RACES	
	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE
1963	15,691	22.8	9,749	16.5	(NA)	(NA)	(NA)	(NA)	5,942	60.9
1964	15,736	22.7	9,573	16.1	(NA)	(NA)	(NA)	(NA)	6,163	61.5
1965	14,388	20.7	8,595	14.4	(NA)	(NA)	(NA)	(NA)	5,793	57.3
1966	12,146	17.4	7,204	12.1	4,774	50.6	(NA)	(NA)	4,942	48.2
1967	11,427	16.3	6,729	11.3	4,558	47.4	(NA)	(NA)	4,698	44.9
1968	10,739	15.3	6,373	10.7	4,188	43.1	(NA)	(NA)	4,366	41.6
1969	9,501	13.8	5,667	9.7	3,677	39.6	(NA)	(NA)	3,834	37.7
1970	10,235	14.9	6,138	10.5	3,922	41.5	(NA)	(NA)	4,097	39.6
1971	10,344	15.1	6,341	10.9	3,836	40.7	(NA)	(NA)	4,003	38.7
1972	10,082	14.9	5,784	10.1	4,025	42.7	(NA)	(NA)	4,298	41.3
1973	9,453	14.2	5,462	9.7	3,822	40.6	1,364	27.8	3,991	38.3
1974[r]	9,967	15.1	6,079	11.0	3,713	39.6	1,414	28.6	3,888	37.1
1975	10,882	16.8	6,748	12.5	3,884	41.4	1,619	33.1	4,134	38.9

*In thousands, in specified groups.
Beginning with 1969, data are based on 1970 Census Population controls; therefore, they are not strictly comparable to data for earlier years.

[r]Revised.

Sources: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 81, "Characteristics of the Low-Income Population 1970," U.S. Government Printing Office, Washington, D.C., 1971, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 86, "Characteristics of the Low-Income Population: 1971," U.S. Government Printing Office, Washington, D.C., 1972, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 91, "Characteristics of the Low-Income Population: 1972," U.S. Government Printing Office, Washington, D.C., 1973, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 98, "Characteristics of the Low-Income Population: 1973," U.S. Government Printing Office, Washington, D.C., 1975, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 102, "Characteristics of the Population Below the Poverty Level: 1974," U.S. Government Printing Office, Washington, D.C., 1976, Table 1; and U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 106, "Characteristics of the Population Below the Poverty Level: 1975," U.S. Government Printing Office, Washington, D.C., 1977, Table 1.

EXHIBIT 2-13

Poverty rates vary according to family type, as shown in Exhibit 2-14. Almost 21 million persons in families are below the poverty level, which represents a poverty rate of 10.9%. For persons in male-headed families the rate is somewhat lower, 7.1%; for persons in female-headed families, however, the rate is much higher, 37.4%. Because of the income differential between blacks and whites, as previously shown in Exhibit 2-7, the poverty rate is highest for black, female-headed families; in 1975 over half (54.2%) of the persons in these families was below the poverty level.

There are also large differences in the poverty rates for different states and regions. Exhibit shows estimates for 1975 indicating regional differences. The Atlanta region had the highest poverty rate (17.5%), and the Chicago region the lowest (9.3%). The states comprising these regions are listed in a note to Exhibit 2-15. While Census estimates for states were not available for 1975, one private source placed the highest and lowest poverty rate at 6.9% and 32.2%.

Public income maintenance programs have become increasingly significant as a source of personal income, and payments have approximately doubled since 1966. Payments in 1966 accounted for 7.2% of personal income; and in 1975 they accounted for 13.1% of personal income. While there are several components of public income-maintenance payments, public assistance payments have increased from $4.3 billion to $10.4 billion. Exhibit 2-16 shows trends in the Aid for Families of Dependent Children (AFDC) component. Throughout the 1970s, there has been a steady climb in AFDC payments. Part of the increase between 1975 and 1976 can be attributed to the unemployed father segment of AFDC; as Exhibit 2-16 illustates, there was an increase in both payments and the number of recipients in the unemployed father segment. These increases in the unemployed father segment are presumably a consequence of the rapid increase in male unemployment during 1974 and 1975, as previously shown in Exhibit 2-8.

Poverty Rate for Children by Age Grouping, Family Status, and Race: 1975*

FAMILY STATUS AND AGE GROUPING	RACE									
	ALL RACES		WHITE		BLACK		SPANISH ORIGIN		BLACK AND ALL OTHER RACES	
	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE	NUMBER BELOW POVERTY LEVEL	POVERTY RATE
ALL PERSONS	25,877	12.3	17,770	9.7	7,545	31.3	2,991	26.9	8,107	29.3
IN FAMILIES	20,789	10.9	13,799	8.3	6,533	30.1	2,755	26.3	6,990	28.0
RELATED CHILDREN UNDER 18 YEARS	10,882	16.8	6,748	12.5	3,884	41.4	1,619	33.1	4,134	38.9
RELATED CHILDREN 5-17 YEARS	8,034	16.3	4,916	11.9	2,924	41.6	(NA)	(NA)	3,119	39.4
PERSONS IN FAMILIES WITH MALE HEAD AND MALE UNRELATED INDIVIDUALS	13,609	7.8	10,446	6.6	2,761	18.2	(NA)	(NA)	(NA)	(NA)
IN FAMILIES	11,943	7.1	9,221	6.1	2,365	16.9	(NA)	(NA)	(NA)	(NA)
RELATED CHILDREN UNDER 18 YEARS	5,284	9.8	3,934	8.2	1,161	22.1	(NA)	(NA)	(NA)	(NA)
RELATED CHILDREN 5-17 YEARS	3,844	9.4	2,816	7.8	887	22.6	(NA)	(NA)	(NA)	(NA)
PERSONS IN FAMILIES WITH FEMALD HEAD AND FEMALD UN-RELATED INDIVIDUALS	12,268	34.6	7,324	28.1	4,784	53.6	(NA)	(NA)	(NA)	(NA)
IN FAMILIES	8,846	37.5	4,577	29.4	4,168	54.3	(NA)	(NA)	(NA)	(NA)
RELATED CHILDREN UNDER 18 YEARS	5,597	52.7	2,813	44.2	2,724	66.0	(NA)	(NA)	(NA)	(NA)
RELATED CHILDREN 5-17 YEARS	4,190	50.0	2,100	40.5	2,036	65.8	(NA)	(NA)	(NA)	(NA)

*Numbers in thousands.
NA: Not available.

EXHIBIT 2-14

Poverty Rate for Children by Age Grouping, Family Status, and Race: 1975

EXHIBIT 2-14 (Continued)

Sources: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 103, "Money Income and Poverty Status of Families and Persons in the United States: 1975 and 1974 Revisions," (Advance Report), U.S. Government Printing Office, Washington, D.C., 1976, Table 7.

All Persons by Poverty Status, Race, and Federal Regions: 1975*

Federal Regions[1]	Race								
	All Races			White			Black		
	Estimated Total	Estimated Number Below Poverty Level	Percent Below Poverty Level	Estimated Total	Estimated Number Below Poverty Level	Percent Below Poverty Level	Estimated Total	Estimated Number Below Poverty Level	Percent Below Poverty Level
Boston	12,136	1,222	10.1	11,664	1,125	9.6	366	96	26.1
New York	24,266	2,530	10.4	20,905	1,836	8.8	2,940	654	22.3
Philadelphia	23,797	2,456	10.3	20,149	1,592	7.9	3,413	814	23.9
Atlanta	34,753	6,075	17.5	27,135	3,116	11.4	7,334	2,894	39.5
Chicago	44,581	4,167	9.3	40,064	3,107	7.8	4,222	1,011	23.9
Dallas-Fort Worth	22,568	3,908	17.3	19,280	2,582	13.4	3,118	1,302	41.7
Kansas City	10,588	1,100	10.4	9,894	856	8.6	660	236	35.8
Denver	6,092	666	10.9	5,933	625	10.5	51	---	---
San Francisco	24,747	2,870	11.6	21,100	2,189	10.4	1,829	496	27.1
Seattle	7,336	883	12.0	6,940	743	10.7	156	42	26.6

*Numbers in thousands. Persons as of March 1976.

[1]The ten standard Federal Regions represent groups of states as follows: Region I, Boston: Connecticut, Maine, Massachuestts, New Hampshire, Rhode Island, and Vermont; Region II, New York: New Jersey, and New York; Region III, Philadelphia: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; Region IV, Atlanta: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina,

EXHIBIT 2-15

South Carolina, and Tennessee; Region V, Chicago: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Region VI, Dallas-Fort Worth: Arkansas. Louisiana, New Mexico, Oklahoma, and Texas; Region VII, Kansas City: Iowa, Kansas, Missouri, and Nebraska; Region VIII, Denver: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; Region IX, San Francisco: Arizona, California, Hawaii, and Nevada; Region X, Seattle: Alaska, Idaho, Oregon, and Washington.

Source: Bureau of the Census, Current Population Reports, Series P-60, No. 106, "Characteristics of the Population Below the Poverty Level: 1975," U.S. Government Printing Office, Washington, D.C., 1977, Table 10.

AID TO FAMILIES WITH DEPENDENT CHILDREN	March 1975	Feb. 1976	March 1976
	Millions of Dollars		
Money Payments, TOTAL	750.1	813.2	883.0
Money Payments-Unemployed-Father Segment	36.3	48.7	50.7
	Thousands of Recipients		
Recipients, TOTAL	11,376	11,454	11,486
Recipients-Unemployed Father Segment	533	657	676

Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C., U.S. Government Printing Office, September 1976, page 14.

EXHIBIT 2-16

As the preceding exhibits and discussion of the family, employment, and poverty suggest, there are many children living in low-income or other disadvantaged families. These children, their circumstances, and the programs focusing on them and their families are discussed in more detail in Chapter 3.

PART B

PROGRAMS RESPONSIVE TO THE STATUS OF CHILDREN AND FAMILIES

CHAPTER 3: SPECIAL CONDITIONS OF CHILDREN IN FAMILIES

The American family is undergoing a variety of changes, as indicated by the data shown in Chapter 2. These changes in the family have some significant implications for children. These implications are particularly poignant for children, because of the disadvantagement of some families and the possibility that some children may thereby be placed at risk. This chapter discusses some of the conditions facing families that may place children at risk; it also discusses some of the programs and human development services targeted upon them.

Children in Single Parent Families

Within the past ten years, the incidence of families without a male head has grown nearly ten times as fast as mother-father families. The large increase in families headed by a female is due primarily to the increasing incidence of divorce, illegitimate births to adolescents, and an increasing tendency for women to establish households independent of relatives. In attempting to identify some of the reasons for rising divorce rates, Ross and Sawhill (1975) found that the husband's employment problems and the wife's access to alternative sources of support were significant predictors of marital instability although no positive correlation between family income and stability emerged in a study of some 2,500 families monitored over a 5-year period. Moreover, other studies indicate that welfare payments affect family structure by discouraging marriage or remarriage. Thus, some single-parent families are encouraged to depend upon welfare payments as their source of income.

Based upon the latest available information about divorce rates, one projection is that roughly one-third of all marriages will ultimately end in divorce. However, although many families will at one time or another be single-parent families, most are single-parent families only temporarily, for studies show that remarriage and the formation of new husband-wife families is common. For many single-parent families, however, there is no "way out." They remain trapped in poverty, with relatively little opportunity for the parent. Reilly (1976) concludes that lower levels of education, occupational status, and income are associated with divorce; these factors contribute to making children in such families at risk.

Despite the falling birth rate there is a tendency for the number of children in female-headed families to remain constant or, perhaps, to increase somewhat--counter to the trend in the population overall. Exhibit 3-1 illustrates this phenomenon, using data between 1971 and 1976. For example, there were 861,000 children (all ethnic groups) below age 3 in female-headed families in 1971; this figure has varied somewhat since then reaching a minimum of 837,000 in 1974 and a maximum of 928,000 in 1973--but with no obvious long-range trend emerging. However, if all children and youth under age 18 are considered, a pattern emerges: there is a systematic trend for the number of children and youth in female-headed families to increase. Between 1971 and 1976, this number has increased from about 7.8 million to 9.4 million--about a 20-25% increase in five years. In contrast, the number of children and youth in male-headed households with no female has fluctuated but has never been nearly as large. For example, for all children under 18 the number was 664,000 in 1971 and 710,000 in 1976.

Number of Children Living in Families, by Age, Race and Type of Family: 1971 - 1976

Race of Family and Children's Age	March 1971				March 1972			
	Total	Husband-Wife Families	Families w/ Male Head, no Female Head	Families w/ Female Head, No Male Present	Total	Husband-Wife Families	Families w/ Male Head, no Female Head	Families w/ Female Head, No Male Present
All Families...								
Total members under 18	70,011	60,010	937	9,064	68,663	58,540	979	9,144
Total own children under 18	66,532	58,015	664	7,853	65,260	56,625	706	7,930
Total own children under 6	19,909	17,821	89	1,999	19,238	17,173	85	1,980
Total own children under 3	9,769	8,877	30	861	9,655	8,772	28	855
White Families...								
Total members under 18	59,191	53,239	676	5,276	58,290	52,088	692	5,510
Total own children under 18	57,303	51,960	521	4,821	56,303	50,796	540	4,966
Total own children under 6	17,030	15,797	69	1,165	16,603	15,409	64	1,130
Total own children under 3	8,401	7,885	26	490	8,344	7,860	21	463
Black Families...								
Total members under 18	9,883	5,956	254	3,673	9,431	5,650	281	3,500
Total own children under 18	8,383	5,309	138	2,935	8,100	5,079	161	2,860
Total own children under 6	2,599	1,768	18	812	2,346	1,504	21	821
Total own children under 3	1,219	852	4	363	1,172	788	7	376
Families of Spanish Origin..								
Total members under 18	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 18	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 6	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 3	NA	NA	NA	NA	NA	NA	NA	NA

Number of Children living in Families, by Age, Race and Type of Family: 1971 - 1976 (continued)

Race of Family and Children's Age	March 1973				March 1974			
	Total	Husband-Wife Families	Families w/ Male Head, no Female Head	Families w/ Female Head, No Male Present	Total	Husband-Wife Families	Families w/ Male Head, no Female Head	Families w/ Female Head, No Male Present
All Families...								
Total members under 18	67,835	57,268	945	9,623	66,850	55,927	980	9,943
Total own children under 18	64,311	55,238	724	8,350	63,556	54,162	741	8,653
Total own children under 6	19,147	16,904	92	2,150	18,510	16,308	96	2,106
Total own children under 3	9,483	8,521	33	928	8,709	7,841	31	837
White Families...								
Total members under 18	57,394	51,155	697	5,542	56,415	49,821	732	5,862
Total own children under 18	55,233	49,712	553	4,968	54,515	48,598	574	5,862
Total own children under 6	16,419	15,211	58	1,149	15,906	14,614	63	1,229
Total own children under 3	8,108	7,628	21	459	7,526	7,033	22	471
Black Families...								
Total members under 18	9,451	5,343	238	3,869	9,420	5,257	237	3,926
Total own children under 18	8,144	4,798	164	3,183	8,069	4,743	158	3,168
Total own children under 6	2,397	1,416	31	950	2,259	1,379	28	852
Total own children under 3	1,210	742	10	458	1,018	644	9	365
Families of Spanish Origin..								
Total members under 18	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 18	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 6	NA	NA	NA	NA	NA	NA	NA	NA
Total own children under 3	NA	NA	NA	NA	NA	NA	NA	NA

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EXHIBIT 3-1 (continued)

Number of Children Living in Families, by Age, Race and Type of Family: 1971 - 1976 (continued)

Race of Family and Children's Age	March 1975				March 1976			
	Total	Husband-Wife Families	Families w/ Male Head, no Female Head	Families w/ Female Head, No Male Present	Total	Husband-Wife Families	Families w/ Male Head, no Female Head	Families w/ Female Head, No Male Present
All Families...								
Total members under 18	65,982	54,361	1,148	10,474	64,924	53,366	924	10,635
Total own children under 18	62,733	52,611	895	9,227	61,697	51,586	710	9,401
Total own children under 6	18,150	15,687	130	2,333	17,639	15,332	80	2,227
Total own children under 3	8,400	7,453	50	896	8,246	7,374	22	851
White Families...								
Total members under 18	55,498	48,291	903	6,304	54,266	47,181	719	6,366
Total own children under 18	53,608	47,086	747	5,774	52,441	45,979	591	5,871
Total own children under 6	15,550	14,008	102	1,440	15,033	13,650	62	1,320
Total own children under 3	7,256	6,674	39	543	7,068	6,577	18	473
Black Families...								
Total members under 18	9,403	5,105	230	4,068	9,422	5,109	185	4,129
Total own children under 18	8,095	4,598	142	3,354	8,123	4,595	102	3,426
Total own children under 6	2,276	1,377	26	873	2,221	1,326	13	881
Total own children under 3	993	632	11	350	992	619	4	369
Families of Spanish Origin..								
Total members under 18	NA	NA	NA	NA	4,427	3,349	59	1,019
Total own children under 18	NA	NA	NA	NA	4,146	3,182	40	924
Total own children under 6	NA	NA	NA	NA	1,397	1,124	12	261
Total own children under 3	NA	NA	NA	NA	684	569	4	111

EXHIBIT 3-1 (continued)

*Numbers in thousands. Excludes inmates of institutions. Includes 914,000 Armed Force members who were living off post, or on post with families. Excludes all other Armed Force members.

NA: Not available.

Sources: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 311, "Household and Family Characteristics: March 1976," U.S. Government Printing Office, Washington, D.C., 1977, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 291, "Household and Family Characteristics: March 1975," U.S. Government Printing Office, Washington, D.C., 1976, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 276, "Household and Family Characteristics: March 1974," U.S. Government Printing Office, Washington, D.C., 1975, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 258, "Household and Family Characteristics: March 1973," U.S. Government Printing Office, Washington, D.C., 1973, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 246, "Household and Family Characteristics: March 1972," U.S. Government Printing Office, Washington, D.C., 1973, Table 1; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 233, "Household and Family Characteristics: March 1971," U.S. Government Printing Office, Washington, D.C., 1972, Table 1.

EXHIBIT 3-1 (continued)

Many female heads of family work. Unpublished 1976 Bureau of Labor Statistics data (appearing in "Minority Women Workers: A Statistical Overview," from the Women's Bureau) indicate that 28.3% of minority women are widowed, divorced, or separated, as compared to 17.6% of the white women. Other data indicate that significant percentages of these women have children. Considering only the women who are widowed, separated, or divorced shows that well over half of the mothers with children are in the labor force, as shown in Exhibit 3-2. These data suggest substantial labor force participation rates for both white and nonwhite groups, both for female heads of households with children under 6 and with children 6-17.

Percent of Widowed, Divorced, or Separated Mothers in the Labor Force by Race and Age of Children (March, 1976)

Age of Children	Minority Women	White Women
Total	57.7%	66.0%
6 to 17 years	60.3%	70.9%
Under 6 years	53.8%	57.2%

EXHIBIT 3-2

The number of children involved is also significant. The Women's Bureau report, mentioned above, indicated that overall 28.2 million children and youth under age 18 had working mothers, of whom more than 1/4 (for minority children, 1/5 for white children) were under age 6. Of these, substantial numbers were in female-headed families, as indicated in Exhibit 3-3, which was retabulated from data appearing in that report.

Number of Children in Female-Headed Families,
by Race and Age of Children (March, 1976)

Age of Children	Minority Women	White Women
Total	1,712,000	3,579,000
6 to 17 years	1,313,000	2,918,000
Under 6 years	399,000	660,000

EXHIBIT 3-3

The report notes that the proportion of minority children whose working mothers were also family heads was about twice as high as that of white children: 36% for minorities as compared to 15% for whites.

The income data for single-parent families were discussed in Chapter 2, and showed that disproportionate numbers of female-headed families have low incomes and are below the poverty level. This will be discussed later in this chapter, in conjunction with low income families.

Adolescent Pregnancy

As the overall fertility rate declines, adolescent pregnancy is becoming increasingly visible as a key indicator of developmental risk for children. Such families may be (though they certainly are not always) single-parent, female-headed families, and as such, share all the risk factors discussed for single-parent families. But, further, adolescent pregnancy is often associated with low levels of income, education, employment status, and certain biomedical risk factors--regardless of family type.

Exhibit 3-4 shows the trend in adolescent birth rates, which may be contrasted with data presented previously showing a substantial overall decline in birth rates. Exhibit 3-4 shows a slight increase in birth rates for mothers between 10 and 14 years of age; the birth rate for mothers between 15 and 17 years of age is erratic but there seems to be no trend either up or down. In contrast, birth rates for mothers 18-19 years of age reflect the general downward trend, falling between 1966 and 1975 from 121.2 to 85.7 live births per thousand women 18-19 years of age.

A more detailed analysis of these rates is provided in Exhibit 3-5, which shows birth rates tabulated by ethnicity. While birth rates are higher for blacks and nonwhites overall for mothers between 10 and 14, there has been a disproportionate rise for whites over this period. The overall birth rates are also higher for blacks and nonwhites than whites for the 15-17 age group, but the data suggest a slight rise for whites between 1966 and 1975, as compared to lower rates for blacks and for blacks and other nonwhites overall during this period. However, the 18-19 year olds for all groups show the general trend towards declining birth rates.

Despite strong feelings on abortion, it is legal and the abortion ratio provides another indicator of the extent of adolescent pregnancy and its consequences. While there are of course many sources of unreliability in such data, Exhibit 3-6 clearly indicates that the abortion ratio is by far the highest for the youngest age group, those under age 15. In every instance, the data in Exhibit 3-6 indicate that the abortion ratio (i.e., the number of legal abortions referred to the number of live births for a given age group) is greatest for the under age 15 group, as compared to women 15-19 and 20-24, and that it is also larger for the 15-19 group than it is for the 20-24 year old group.

Birth Rates for Women 10-19 Years of Age by Maternal Age: 1966-1975*

YEAR	MATERNAL AGE		
	MOTHERS 10-14 YEARS OF AGE	MOTHERS 15-17 YEARS OF AGE	MOTHERS 18-19 YEARS OF AGE
1966	0.9	35.8	121.2
1967	0.9	35.5	117.4
1968	1.0	35.2	114.9
1969	1.0	35.8	115.0
1970	1.2	38.8	114.7
1971	1.1	38.3	105.6
1972	1.2	39.2	97.3
1973	1.3	38.9	91.8
1974	1.2	37.7	89.3
1975	1.3	36.6	85.7

* Rates are live births per 1,000 women in specified group.

Source: National Center for Health Statistics. Teenage Childbearing: United States, 1966-1975 (Monthly Vital Statistics Report Vol. 26, No. 5, Supplement, DHEW Publication No. (HRA) 77-1120). Washington, DC, U.S. Government Printing Office, September 8, 1977, Table 1.

EXHIBIT 3-4

Birth Rates for Women 10-19 Years of Age by Maternal Age and Race: 1966-1975*

YEAR	MATERNAL AGE AND RACE								
	MOTHERS 10-14 YEARS OF AGE			MOTHERS 15-17 YEARS OF AGE			MOTHERS 18-19 YEARS OF AGE		
	WHITE	BLACK	BLACK AND ALL OTHER	WHITE	BLACK	BLACK AND ALL OTHER	WHITE	BLACK	BLACK AND ALL OTHER
1966	0.3	4.3	4.0	26.6	97.9	92.9	109.6	209.6	205.5
1967	0.3	4.4	4.1	25.8	100.0	95.2	104.9	205.2	200.0
1968	0.4	4.7	4.4	25.7	98.9	94.1	102.0	201.3	196.6
1969	0.4	4.9	4.6	26.4	97.3	93.4	101.5	202.9	197.9
1970	0.5	5.2	4.8	29.2	101.4	95.2	101.5	204.9	195.4
1971	0.5	5.1	4.7	28.6	99.7	94.3	92.4	193.8	187.0
1972	0.5	5.1	4.7	29.4	99.9	94.5	84.5	181.7	175.2
1973	0.6	5.4	5.0	29.5	96.8	91.6	79.6	169.5	163.7
1974	0.6	5.0	4.7	29.0	91.0	86.2	77.7	163.0	156.4
1975	0.6	5.1	4.7	28.3	86.6	82.0	74.4	156.0	150.1

* Rates are live births per 1,000 women in specified group.
Source: National Center for Health Statistics. Teenage Childbearing: United States: 1966-1975 (Monthly Vital Statistics Report Vol. 26, No. 5, Supplement, DHEW Publication No. (HRA) 77-1120), Washington, D.C., U.S. Government Printing Office, September 8, 1977, Table 1.

EXHIBIT 3-5

Legal Abortion Ratios by Selected Age Groupings, Selected States: 1972, 1974, and 1975*

STATE	YEAR AND AGE GROUPING								
	1972			1974			1975		
	UNDER 15	15-19	20-24	UNDER 15	15-19	20-24	UNDER 15	15-19	10-24
ALASKA	2,091	359	125	1,909	338	112	1,643	348	151
ARKANSAS	116	37	17	235	71	38	163	84	43
CALIFORNIA	2,664	844	352	2,641	884	396	2,227	905	403
COLORADO	1,397	272	111	1,750	432	227	1,126	496	229
GEORGIA	191	34	22	635	347	245	740	419	287
HAWAII	1,143	535	279	1,462	440	269	1,147	458	290
KANSAS	3,051	716	289	3,216	721	230	2,413	595	204
MARYLAND	1,275	330	139	1,878	628	266	1,940	740	329
MISSISSIPPI	2	2	1	7	3	3	16	9	7
NEW YORK	5,512	2,623	1,106	2,749	1,308	659	2,535	1,201	633
(CITY)	(7,675)	(4,012)	(1,768)	(3,458)	(1,859)	(1,116)	(2,889)	(1,612)	(1,033)
(UPSTATE)	(2,997)	(1,417)	(527)	(1,827)	(788)	(291)	(1,996)	(815)	(310)
N.CAROLINA	497	128	71	772	279	161	739	362	217
OREGON	3,308	453	186	1,955	598	222	2,313	754	280
S.CAROLINA	118	18	12	245	102	73	234	138	90
VERMONT	100	62	27	1,417	582	266	2,727	667	316
VIRGINIA	545	97	46	1,068	384	192	1,213	477	248
WASHINGTON	3,242	877	298	2,576	849	327	2,560	984	357

* Calculated as the number of legal abortions for women of a given age group per 1,000 live births to women of same age group.

Sources: Center for Disease Control: Abortion Surveillance: 1972, issued April 1974, Table 7; Center for Disease Control: Abortion Surveillance 1974, issued April 1976, Table 7; Center for Disease Control: Abortion Surveillance 1975, issued April 1977, Table 7.

Illegitimacy rates for these groups can be taken as an approximate indication of how many children will be in single-parent families headed by females, since many will not wed. Exhibit 3-7 indicates a rise in the rate of illegitimacy for mothers between 15 and 17 years of age which, overall, has increased from a rate of 13.1 to 19.5. Again, though rates are higher for blacks and nonwhites overall, the rate is driven up by the increased illegitimacy rates for whites (which almost doubled, from 5.4 to 9.7). Also to be noted is the fact that illegitimacy among blacks and nonwhites overall for the 18-19 age group has apparently remained the same or decreased, and that the rise in illegitimacy for this age group is attributable to whites; the rate for whites increased from 14.3 (1966) to 16.6 (1975).

The fact of adolescent pregnancy as an emerging concern is suggested by the recent hearings in support of the National School-Age Mother and Child Act of 1975. Overall illegitimacy rates (grouped for ages 15-19) are shown in Exhibit 3-8, which provides additional comparisons with older age groups. Note that, as indicated, the 15-19 age group is the only age group shown for which illegitimacy (and therefore, presumably, single-parent families formed thereby) has been systematically increasing.

More important are the consequences of adolescent pregnancy. While Dr. Janet Hardy (in a Johns Hopkins study for NINCDS, cited elsewhere) indicated that "...some of the young mothers and their children have been successful, many negative outcomes are also indicated." Exhibit 3-9 was prepared from data presented in her testimony.

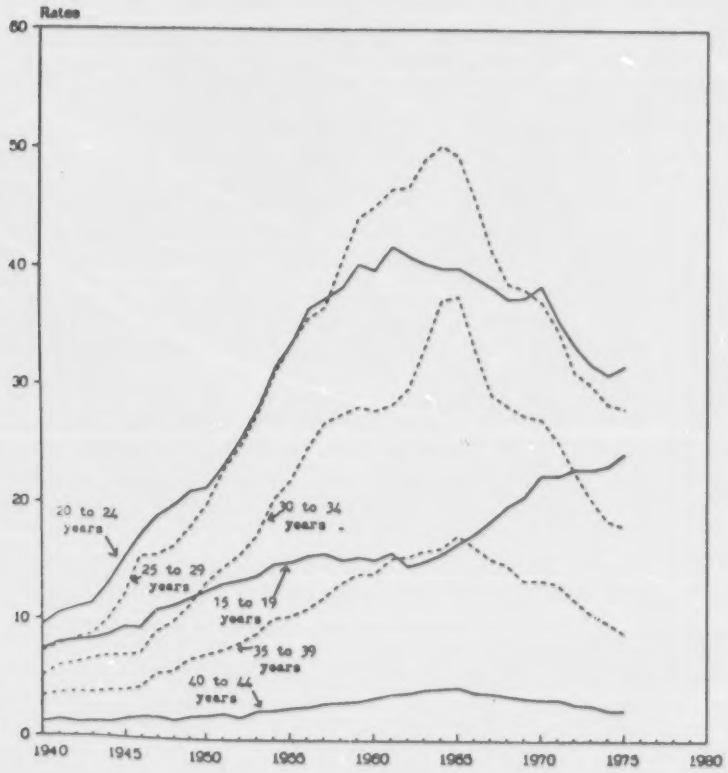
Estimated Illegitimacy Rates for Unmarried Women 15-17 and 18-19 Years of Age by Race: 1966-1975*

YEAR	MATERNAL AGE AND RACE							
	MOTHERS 15-17 YEARS OF AGE				MOTHERS 18-19 YEARS OF AGE			
	TOTAL	WHITE	BLACK	BLACK AND ALL OTHER	TOTAL	WHITE	BLACK	BLACK AND ALL OTHER
1966	13.1	5.4	NA	61.2	25.8	14.3	NA	110.5
1967	13.9	5.6	NA	64.9	27.8	15.4	NA	112.4
1968	14.7	6.2	NA	67.3	30.0	16.8	NA	114.8
1969	15.2	6.6	72.3	68.4	31.5	17.0	129.1	120.7
1970	17.1	7.5	77.9	73.3	32.9	17.6	136.4	126.5
1971	17.6	7.4	80.9	75.7	31.7	15.9	136.3	126.5
1972	18.6	8.1	82.9	78.1	31.0	15.1	129.8	120.6
1973	18.9	8.5	81.9	76.5	30.6	15.0	123.0	114.6
1974	19.0	8.9	79.4	74.3	31.4	15.4	124.9	115.9
1975	19.5	9.7	77.7	72.0	32.8	16.6	126.8	117.4

* Rates are illegitimate live births per 1,000 unmarried women in specified group.

Source: National Center for Health Statistics. Teenage Childbearing: United States, 1966-1975 (Monthly Vital Statistics Report Vol. 26, No. 5, Supplement, DHEW Publication No. (HRA) 77-1120). Washington, D.C., U.S. Government Printing Office, September 8, 1977, Table 4.

EXHIBIT 3-7



Rates of Illegitimate Births Per
1,000 Unmarried Women

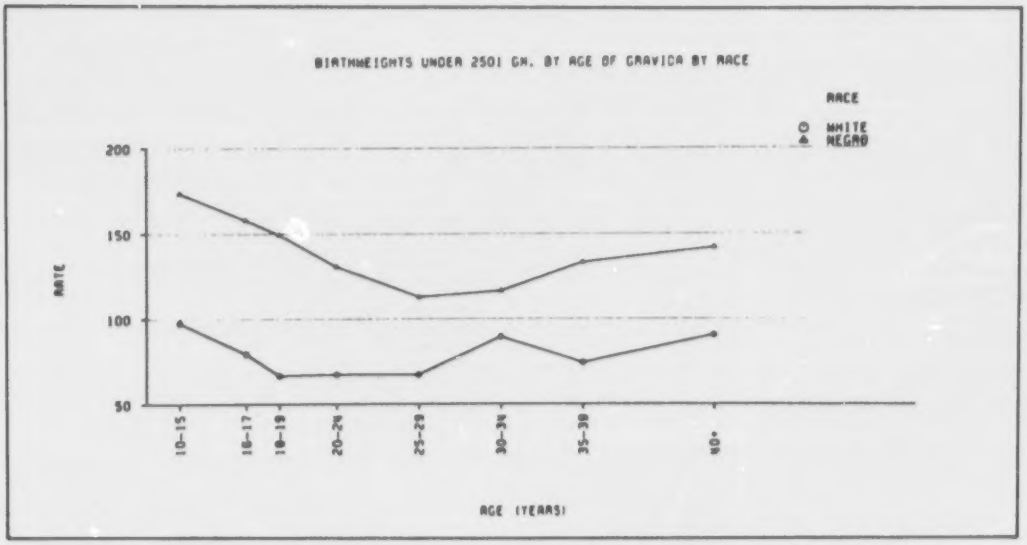
EXHIBIT 3-8

Occurrence of Intelligence Quotients,
by Year and Population Group

I.Q. at Indicated Age	School-aged Mothers: Johns Hopkins Study	General Population (as cited in testimony)
At Age 4:		
I.Q. 70 and below	11.0%	2.6%
I.Q. 110 and above	5.0%	25.0%
At Age 7:		
I.Q. 70 and below	5.3%	2.2%
I.Q. 110 and above	2.8%	25.0%

EXHIBIT 3-9

A number of other biomedical (as well as sociological) consequences have been linked to adolescent pregnancy. It is well known that risks increase for mothers above 30--and especially above 40. Similarly, risks rise for young mothers below age 20 and are greatest for children born to this group, as indicated by low birth weights in Exhibit 3-10.



Source: The Collaborative Perinatal Study of the National Institute of Neurological Diseases and Stroke. The Women and Their Pregnancies, Washington, D.C.: U.S. Government Printing Office, DHEW Publication Number (NIH) 73-379, 1972, page 64.

EXHIBIT 3-10

In a review of the literature Hunt (1976) cites several other biomedical consequences both to the mother and the child. Studies suggest that, in addition to increased risk of maternal mortality among young mothers, there are other medical complications, including: first or third trimester bleeding; complications of labor, including prolonged or difficult labor, and cephalopelvic disproportion; and toxemia of pregnancy. For the infants of these mothers, risks of prematurity and low birth-

weight are greatly increased. Low birthweight is associated with infant mortality, congenital defects, and mental and physical handicaps, including: epilepsy, cerebral palsy, retardation, blirdness, and deafness.

Data appearing in Hunt's review (adapted from Puffer and Serrano, 1975) and taken from an inter-American study of childhood mortality are shown in Exhibit 3-11. Data below are for selected countries but are illustrative of the overall trend. In every instance neonatal mortality (deaths in the first 27 days of life) and infant mortality (deaths in the first year of life) were higher for the under 20 age group.

Neonatal and Infant Mortality for Selected Countries by Maternal Age

Country	Neonatal Mortality		Infant Mortality	
	All Mothers	Mothers under 20	All Mothers	Mothers under 20
Argentina (Chaco Province)	32.3	53.4	80.1	133.5
Canada (Sherbrooke)	13.5	16.4	18.3	21.2
Mexico (Monterrey)	26.0	33.1	60.7	86.3
USA (San Francisco)	12.7	17.2	17.5	26.2

EXHIBIT 3-11

Although the U.S. Office of Education stresses that every pregnant adolescent has a right to continue her education, the prognosis is not good. Over half of the female dropouts quit school because of pregnancy. Furstenberg (1976) notes large differences in localities; in some areas there are school-based programs for the pregnant adolescents, whereas in others, she is simply encouraged to leave school. Furstenberg cites

figures indicating that there were about 225 special programs in 1972, which served perhaps 20% of the pregnant students. He also cites an unofficial estimate, made in 1975, that there were then perhaps 350 programs reaching 33% of the pregnant teenagers.

The efficacy of prevention, as compared to remediation, is suggested by Exhibit 3-12 appearing in Hunt (1976). Once the teenager is pregnant, she faces increased risks no matter what choices she subsequently makes, and no matter how intensive programmatic efforts are on her behalf. Furstenberg suggests that "...an ounce of prevention is worth a pound of cure may be hackneyed but is also true" and that "...one cannot help but be discouraged by the timidity of the approach toward prevention."

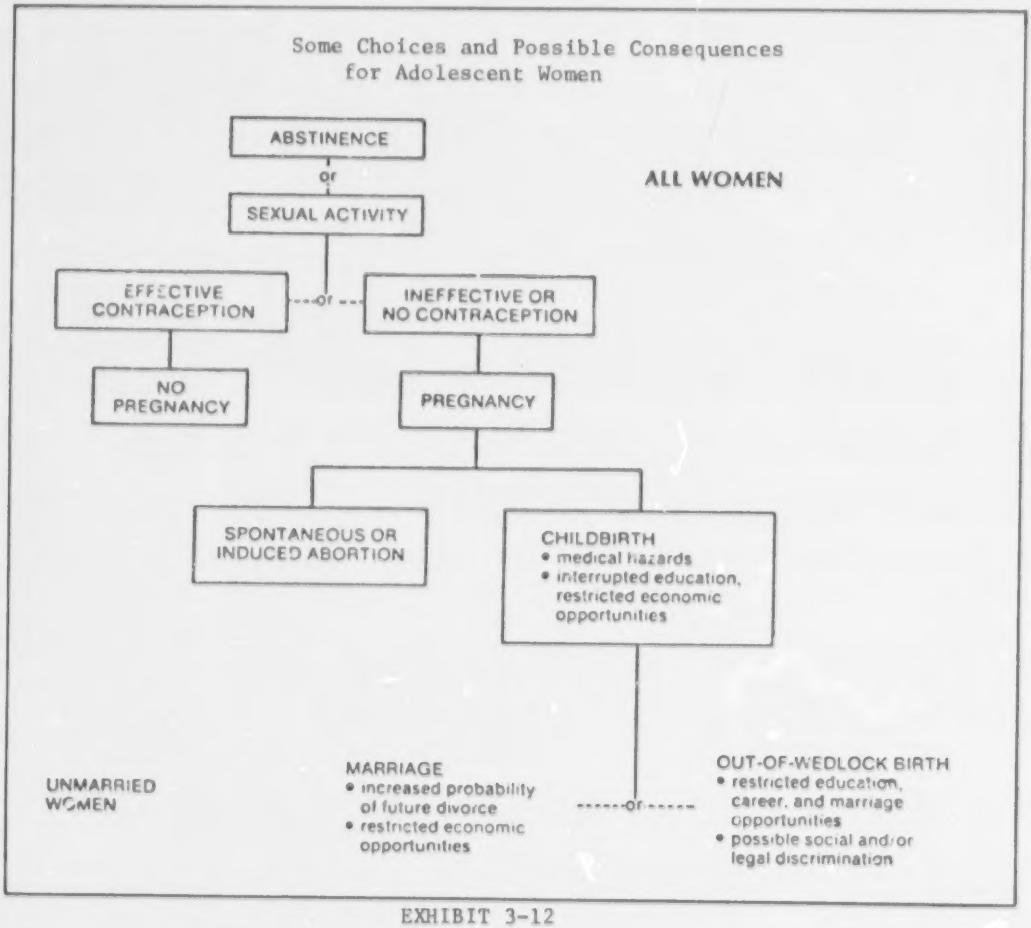


EXHIBIT 3-12

While at the time of this writing the Department of Health, Education, and Welfare is debating its posture towards adolescent pregnancy (as discussed more fully in Chapter 6), most programs are only tangentially related to adolescent pregnancy and problems induced by it. A variety of health programs such as Medicaid are available, but typically focus on the teenager who is already pregnant. Other programs include child abuse (under the Child Abuse Prevention and Treatment Act of 1975), runaway youth (under the Runaway Youth Act), social services (under Title XX), child welfare services (Title IV-B), mental health services (through the Community Mental Health Centers Act), and special education projects, among others.

The primary effort on prevention is currently through Family Planning Projects. Family Planning Projects (13.217) of the Health Services Administration of DHEW helps individuals to freely determine the size and spacing of their children through educational, medical, and social service programs. Project grants support nearly 47,000 public or nonprofit clinics throughout the United States serving nearly three million persons. It is expected that 3,278,000 persons will be served in 1978. An estimated $107,500,000 will be spent in 1977; $117,500,000 in 1978. Grants may be used for contraceptive advice and services to patients; counseling and interpretation to individuals of services provided; physical examinations, tests, diagnostic and treatment services for infertility; contraceptive supplies on continuous basis, and periodical followup examinations. Priority in the provision of services is given to persons from low-income families who would not otherwise have access to them. Outreach programs for teenagers emphasize education, and clinic staff members serve as resource persons for community schools which request their services. Funds have supported model demonstration projects in school settings.

Low Income Families

Many families, although disadvantaged, succeed in overcoming disadvantagement and successfully rearing their children. Other families, seemingly less disadvantaged, may be less successful. Although there are no particularly valid or reliable indicators of successful rearing of children, many have been suggested; these include, among others, parental age, parental education, socio-economic status, ethnicity, type of family, and income. Despite the inherent lack of validity and reliability of any such indicator, family income has been especially prominent both because it has been embodied in many programs and because it is the focal point of recent studies regarding federal policy and the family.

Many families experience low- or poverty-level incomes for a relatively brief period of time. But for some families poverty may perpetuate itself, and may become a chronic, even intergenerational problem. Mechanisms whereby poverty can perpetuate itself are complex, but a model of some of the interrelations is provided by Birch and Gussow (1970). The interrelationships are described in Exhibit 3-13.

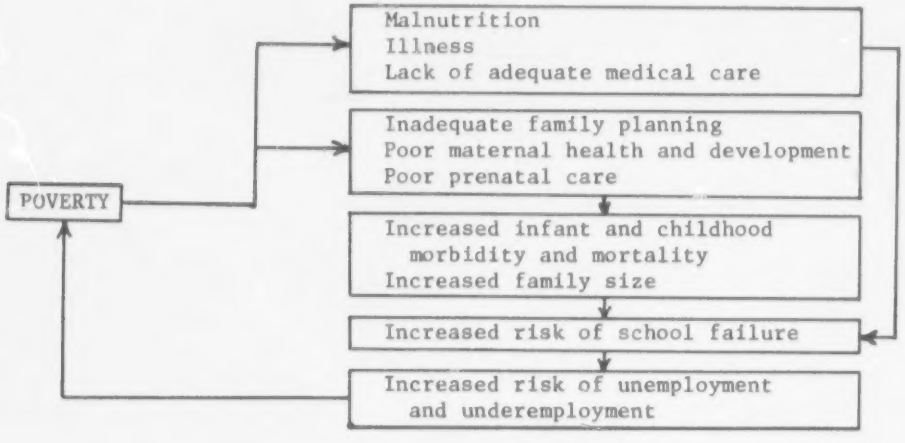


EXHIBIT 3-13

For example, poor nutrition and lack of necessary medical care and services may result in lack of educational attainment and low income for the child as an adult.

Exhibit 3-14 shows the percentage of families below the poverty level in which the head of household did not graduate from high school. In approximately two-thirds of the households below poverty the head did not graduate from high school--a percentage which is much higher than that of the general population.

Percent of Heads of Families Not Graduating from High School

	Ethnicity		
All Families	White	Black	Spanish Origin
66.1%	63.6%	74.0%	84.2%[1]

[1]Note: Persons of Spanish origin may be of any race, although the vast majority are white.

Source U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 106, "Characteristics of the Population Below Poverty Level: 1975," U.S. Government Printing Office, Washington, D.C., 1955, Table 5.

EXHIBIT 3-14

Exhibit 3-14 suggests that noncompletion of high school is related to ethnicity in the poverty population. The percentage of white heads of household who did not complete high school was 63.6, whereas almost 75% of the black heads of families and almost 85% of the Spanish-origin heads of families did not complete high school.

As Exhibit 3-15 shows, female-headed families are much more likely to be below the poverty level than male headed families are. Although about 85% of all families are headed by males, as noted in Chapter 2, about 45% (2,430,000 out of 5,450,000 total families) below the poverty level are headed by females. Further, the poverty rate for male-headed families is 6.2--much lower than the poverty rate of 32.5 for female-headed families.

Exhibit 3-15 shows how educational attainment is linked to the sex of the head of the family. The poverty rate for male-headed families, in which the family head had less than an 8th grade education, was 18.6; for female-headed families the corresponding rate was 40.7. For both male-headed and female-headed families, the poverty rate tends to decrease at higher education levels. For example, in families where the head has had college experience, the poverty rates are 2.3 (for male-headed families) and 10.9 (for female-headed families). Thus, both educational level and sex of family head are related to poverty status, and exceptionally high poverty rates are found for female-headed families in which the family head has less than a high school education. This latter group, female-headed families with less than a high school education, includes families in which the mother failed to complete high school because of pregnancy.

Exhibit 3-16 shows the number of families below the poverty level, and the average number of children in those families which have children. Almost 4 million white families and over 1.5 million black families were below the poverty level. Tabulating families of Spanish-origin separately shows that over 600,000 families were below the poverty level. These numbers correspond to poverty rates of 27.1 for black

Selected Characteristics of Families Below the Poverty Level by Sex of Family Head: 1975*

SELECTED CHARACTERISTICS	SEX OF FAMILY HEAD					
	MALE HEAD			FEMALE HEAD		
	NUMBER	PERCENT	POVERTY RATE	NUMBER	PERCENT	POVERTY RATE
All Families	3,020	100.0	6.2	2,430	100.0	32.5
Educational Attainment of Family Head**						
Elementary						
<8 years	891	295	18.6	402	16.5	40.7
8 years	393	13.0	9.2	236	9.7	33.6
High School						
1-3 years	497	16.5	7.6	621	25.6	44.6
4 years	516	17.1	3.4	575	23.7	23.7
College	336	11.1	2.3	134	5.5	10.9

*Numbers in thousands.

**Includes only persons over 25.

Source: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 106, "Characteristics of the Population Below Poverty Level: 1975," U.S. Government Printing Office, Washington, D.C., 1977, Table 5.

EXHIBIT 3-15

Selected Characteristics of Families
Below the Poverty Level

	All Families	Ethnicity		
		White	Black	Spanish Origin[1]
Number of Families Below Poverty Level	5,450,000	3,838,000	1,513,000	627,000
Average Number of Children in Families with Children	2.61	2.43	2.96	2.94

[1]Note: Persons of Spanish origin may be of any race, although the vast majority are white.

Source: U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 106, "Characteristics of the Population Below Poverty Level: 1975," U.S. Government Printing Office, Washington, D.C., 1977, Table 5.

EXHIBIT 3-16

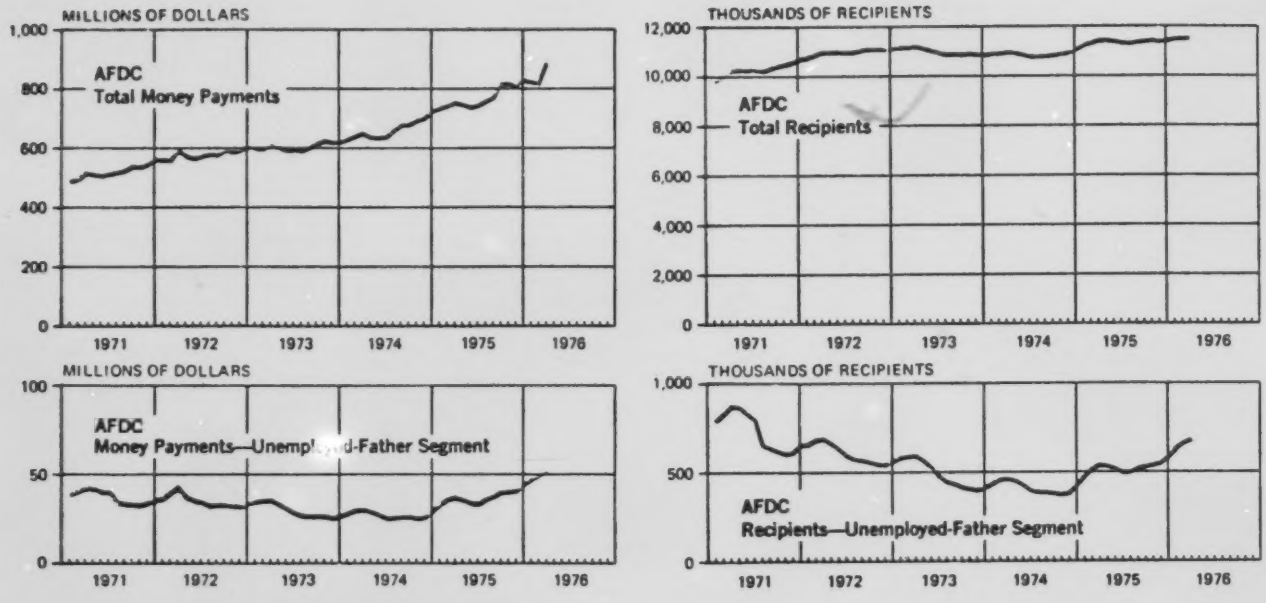
families, 25.1 for Spanish-origin families, and 7.7 for white families overall. An additional factor which helps account for the relatively high rate of poverty for black children and children of Spanish origin, as shown in Chapter 2, is the fact that the number of children involved is somewhat higher for those groups than for all families or for whites overall. For example, the average number of children in black families with children is 2.96; in white families the number of children is 2.43.

Human Development Services and Programs

A wide variety of services and programs focus on children and families, for the broadly defined purpose of fostering human development. These services and programs are targeted in different ways, but tend to emphasize primarily low income persons, families, and geographic areas.

For example, income assistance and maintenance programs are designed to augment income, and have become increasingly significant as a source of personal income, with payments roughly doubling since 1966. Such payments accounted for 7.2% of personal income in 1966; but the corresponding figure for 1975 was 13.1%. While there are several components of public income-maintenance payments, public assistance payments have increased from $4.3 billion to $10.4 billion--a trend which continued into 1976 as indicated in Exhibit 3-17. Part of the increase between 1975 and 1976 can be attributed to payments to families in which the father is unemployed. Thus, the income in total payments and number of recipients for unemployed fathers helped drive up the total amount of payments, although the total increase over this period in number of recipients was quite small.

As compared to the changing age structure of the general population (see Exhibit 1-11), the age structure of the Aid for Dependent Children (AFDC) caseload has remained quite constant within the 1970s. Exhibit 3-18 does not, for example, indicate a marked decline for the younger age groups. Changes, if any, are small. For example, the percentage of the caseload comprised of children under 3 has been 16.0%, 16.6%, and 15.8% for the comparison years of 1971, 1973, and 1975. Increases for the older groups were correspondingly small.



Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C., U.S. Government Printing Office, September 1976, page 14.

EXHIBIT 3-17

A more detailed analysis of AFDC recipients and payments through 1976 is provided by Exhibit 3-19. It shows a slight decline in the number of recipients between 1975 and 1976, although total payments increased as in previous years.

Another form of assistance is provided through the Food Stamps program (10.551)* of USDA's Food and Nutrition Service. It allows eligible families to purchase coupons of higher monetary value, in order to improve their diet. State public assistance agencies submit requests for participation in the program on behalf of their local political subdivisions;

*Numbers in parentheses are assigned by the Office of Management and Budget. A listing of selected programs is included in the appendix to this report.

Distribution of AFDC Funding: 1971, 1973, and 1975*

YEAR	AGE											
	CHILDREN UNDER 21 YRS. OLD		Children 15 to 20 Yrs. Old		Children 9 to 14 Years Old		Children 3 to 8 Years Old		Children Under 3 Yrs.		Unborn	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1971	7,015	100.0	1,043	14.9	2,302	32.8	2,494	35.6	1,123	16.0	53	.8
1973	7,725	100.0	1,139	14.7	2,540	32.9	2,717	35.2	1,284	16.0	44	.7
1975	8,121	100.0	1,219	15.0	2,661	32.8	2,837	34.9	1,286	15.8	53	.7

*In thousands, in specified groups.

Sources: National Center for Social Statistics. Findings of the 1971 AFDC Study Part I: Demographic and Program Characteristics (NCSS Report AFDC-1 (71), DHEW Publication No. (SRS) 72-03756), Washington, D.C., December 1971, Table 33; National Center for Social Statistics. Findings of the 1973 AFDC Study Part I: Demographic and Program Characteristics (NCSS Report AFDC-1 (73), DHEW Publication No. (SRS) 74-03764), Washington, D.C.: U.S. Government Printing Office, June 1974, Table 21; and National Center for Social Statistics, unpublished data.

EXHIBIT 3-18

AFDC Recipients and Payments:
December 1965 - December 1976

Year	Recipients and Payments	
	Recipients[1]	Payments[2]
1965	4,396	$144,355
1966	4,666	$169,155
1967	5,309	$209,736
1968	6,086	$272,460
1969	7,313	$330,113
1970	9,659	$485,877
1971	10,651	$557,003
1972	11,069	$598,912
1973	10,815	$616,074
1974	11,006	$713,934
1975	11,383	$816,380
1976	11,184	$844,044

[1] In Thousands

[2] In Thousands of Dollars

Recipients: Children and one or both parents or one adult caretaker relative other than a parent in families in which the requirement of such adults were considered in determining the amount of assistance.

Sources: National Center for Social Statistics. Trend Report: Graphic Presentation of Public Assistance and Related Data, Demographic and Program Characteristics and Financial Characteristics of Recipients 1971 (NCSS Report A-4 (71), DHEW Publication No. (SRS) 73-03101). Washington, D.C., U.S. Government Printing Office, 1971, pp. 3 and 5; National Center for Social Statistics. Public Assistance Statistics, December 1973 (NCSS Report A-2 (12/73), DHEW Publication No. (SRS) 74-03100), April 1974, Table 1; National Center for Social Statistics. Public Assistance Statistics, December 1975 (NCSS Report A-2 (12/75), DHEW Publication No. (SRS) 76-03100), April 1976, Table 1; National Center for Social Statistics. Public Assistance Statistics, December 1976 (NCSS Report A-2 (12/76), DHEW Publication No. (SRS) 77-03100), April 1977, Table 1; and personal communication.

EXHIBIT 3-19

local welfare agencies certify eligible households individually. Eligibility criteria for families include receiving some form of welfare assistance, unemployment, part-time employment, or receiving low wages or limited pensions; families not receiving welfare assistance may qualify by family size and income, and level of resources. Most able-bodied adults must meet a work registration requirement. During fiscal year 1977, every area in every state operated this program, in which approximately 17.7 million people participated, compared to 18.6 million in fiscal year 1976 and 17.1 million in fiscal year 1975. It is estimated that the average expenditure per person will be $24.35 per month in fiscal year 1977, and $25.26 in fiscal year 1978.

The Child Welfare Services program, in the Office of Human Development Services, is designed to establish, extend, and strengthen services provided by state and local public welfare programs for development of preventive or protective services which will prevent the neglect, abuse, exploitation, or delinquency of children. The program awards formula grants to states, the District of Columbia, Puerto Rico, the Northern Marianas, the Virgin Islands, and Guam for such uses as: providing child protection service personnel; licensing and setting standards for private child care agencies; foster care; day care; homemaker services; return of runaway children; and adoptive placements. All families and children in need of such services are eligible to receive them. In fiscal year 1976, when grants amounted to $52,492,730, it is estimated that 275,000 families were served by the program, and 494,000 children. In fiscal year 1977, grants are estimated at $56,500,000 to provide services for 592,000 children.

The Indian Social Services—Child Welfare Assistance program (15.103) of the Bureau of Indian Affairs is designed to provide foster home care and appropriate institutional care for dependent, neglected, and handicapped Indian children residing on or near reservations or in jurisdictions controlled by the Bureau of Indian Affairs in Alaska and Oklahoma. Direct payments are made upon application by a parent, guardian, or person having custody of the child; payments are usually provided monthly for as long as the need continues. Assistance was provided for the care of a monthly average of 3,100 children in fiscal year 1975; 3,200 children in fiscal year 1976; and an estimated 3,300 children in fiscal year 1977. The cost of direct payments was approximately $8,153,310 in fiscal year 1975; $7,809,000 in fiscal year 1967; and $9,351,000 in fiscal year 1977. An estimated $11,218,000 will be required to continue the program in fiscal year 1978.

The Appalachian Child Development program (23.013) of the Appalachian Regional Commission has as its objectives the creation of a state-level capability for planning child development programs and a program for providing child development services in underserved areas throughout the region. Project grants in the form of planning grants and technical assistance grants are awarded for the development of programs to benefit children up to six years of age and their families in the Appalachian region. Planning grants are awarded only by the State Interagency Committee designated by the Governor; public and private nonprofit organizations are eligible for project grants, if the projects conform to the annual State Appalachian Plan. In fiscal year 1975, 240 services projects were funded in 13 states, at a level of $20,891,695; in fiscal year 1976, 200 projects were funded at an estimated level of $20,312,000; in fiscal year 1977, 190 service projects sere funded for an approximate $16,100,000; and it is estimated that 140 service projects will be in operation in fiscal year 1978 at the level of $10,000,000.

The Youth Challenge Program (72.009) of ACTION is designed to give student volunteers in the 14 to 21 age group the opportunity to serve poverty communities in ways which will relate to the youths' classroom, vocational, or personal development needs. Project grants are awarded to such community sponsors as high schools, community or junior colleges, colleges, or other public or private nonprofit organizations. The projects in which these sponsors propose to use volunteers must be poverty-related, assisting low-income, developmentally disabled, mentally ill, or severely handicapped persons. Volunteers are not to displace employed workers, and their sponsoring agency is not to be compensated for their services. In fiscal year 1976, thirty sponsors fielded 3,200 part-time volunteers, with grants amounting to $300,000; in fiscal years 1977 and 1978, the level of funding is approximately $224,000.

The Program for Better Jobs and Income, proposed by the Carter administration in August 1977, would replace the existing Aid to Families with Dependent Children, Supplemental Security Income, and Food Stamp programs with a uniform minimum cash assistance payment for the needs, combined with the creation of up to 1.4 million public service and training positions, the expansion of the Earned Income Tax Credit to aid workers with modest incomes, the strengthening of eligibility and work requirements for benefit recipients, and fiscal relief for states and localities.

The Public Service Employment Program, designed to secure jobs for the principal wage earners of low income families, will emphasize job activities leading to the acquisition of useful skills by the participants at a wage rate equal to or only slightly above the minimum wage. The Work Benefit Program will augment low incomes earned by two-parent families, single people, childless couples, and single parents with no child under 14, all of whom will be required to work full-time and to accept available work. The Income Support Program will benefit persons without jobs: the aged, blind, or disabled, and single

parents of children under 14; single parents with children 7 to 14 will be expected to accept part-time work. The Earned Income Tax Credit will allow a greater number of low and modest income working people to subtract a percentage of their income from their federal income tax bills. Although states may supplement the basic benefits, following federal eligibility criteria and maintaining the work incentives established by the federal program, they will save at least 10 percent of their current welfare expenses in the first year of the program, and more thereafter, until they are paying only the required 10 percent of the basic federal income benefits.

It is expected that 32 million people will qualify for benefits under the new program, compared to about 30 million now receiving benefits from three programs scheduled for replacement. An additional 20 million working people would qualify for the tax credit. In all, the program would cost about $31 billion in its first year, and would benefit in some way nearly one out of every six people. However, the Program for Better Jobs and Income is planned to reduce welfare fraud substantially, and to insure that work will always be more profitable than welfare, and that a private job or public job not supported by the Federal Government will always be more profitable than a federally-created job.

CHAPTER 4: HEALTH STATUS AND PROGRAMS

The overall health status of the American population has been steadily improving over a long period of time, as suggested by the mortality data in Chapter 1. Changes in the health status of children, as reflected by falling infant mortality rates, have been particularly dramatic, and much of the improvement can be attributed to the quality and quantity of health care and services.

But health care and services are also expensive. The Subcommittee on Oversight and Investigation of the House Committee on Interstate and Foreign Commerce (1976) reported that total public and private sector health expenditures had risen to $118.5 billion in 1975, almost triple the 1966 figure. These expenditures are, in part, channeled through a number of health programs, such as Medicaid, which are targeted on children and families. Numerous studies have shown that comprehensive health services have a substantial impact upon the health status of the recipients; immunization programs, for example, have proven extremely effective in preventing certain diseases. In describing the health status of children, and health care programs, the key issue is less the quality and effectiveness of services than it is the targeting of the programs.

There are several factors which determine whether or not children enjoy good health, and whether or not they receive adequate services. If the mother does not receive adequate care, for example, the child may suffer long-lasting or permanent health problems. Parents may be unaware of good health and nutrition practices--or they may simply fail to observe them. Inaccessibility of services may also prevent adequate care, especially in

rural, inner-city, or low-income areas which are medically underserved. Inability to pay for services is of course an important factor, particularly if the family and child are not eligible for or do not receive services through a health program.

Although the overall health status of children has improved, factors such as those mentioned in the preceding paragraph prevent many children from receiving adequate medical care and services. The cumulative effect is evident from the available health statistics. As stated by the Children's Defense Fund of the Washington Research Project, Inc. (1976): national statistics demonstrate that "inadequate and unequal provision of health care services to children and pregnant women in this country results in the unnecessary deaths of thousands of children. Many thousands more are disabled or suffer chronic conditions which, if untreated, rob them of years of their lives, impair their productivity, and cost the rest of us millions of dollars for remedial services and support. The statistics are a national scandal." For example, in regard to infant mortality, the National Council of Organizations for Children and Youth has stated, "our children have a much better chance of surviving the first year of life than they used to: 982 of each 1,000 lived to at least age 1 in 1973. But the mortality rate for nonwhites is double that for whites." As previously shown (Exhibit 1-8), the infant mortality rate for all races has dropped from 25.2 infant deaths per 1,000 live births in 1963 to 15.1 in 1976. However, minority groups (blacks and all other races other than white) are more than a decade behind whites in reducing infant mortality rates.

Many of the issues discussed above in relation to basic health care and services are equally applicable to other forms of children's needs, such as the needs of children who have handicapping conditions, or who have

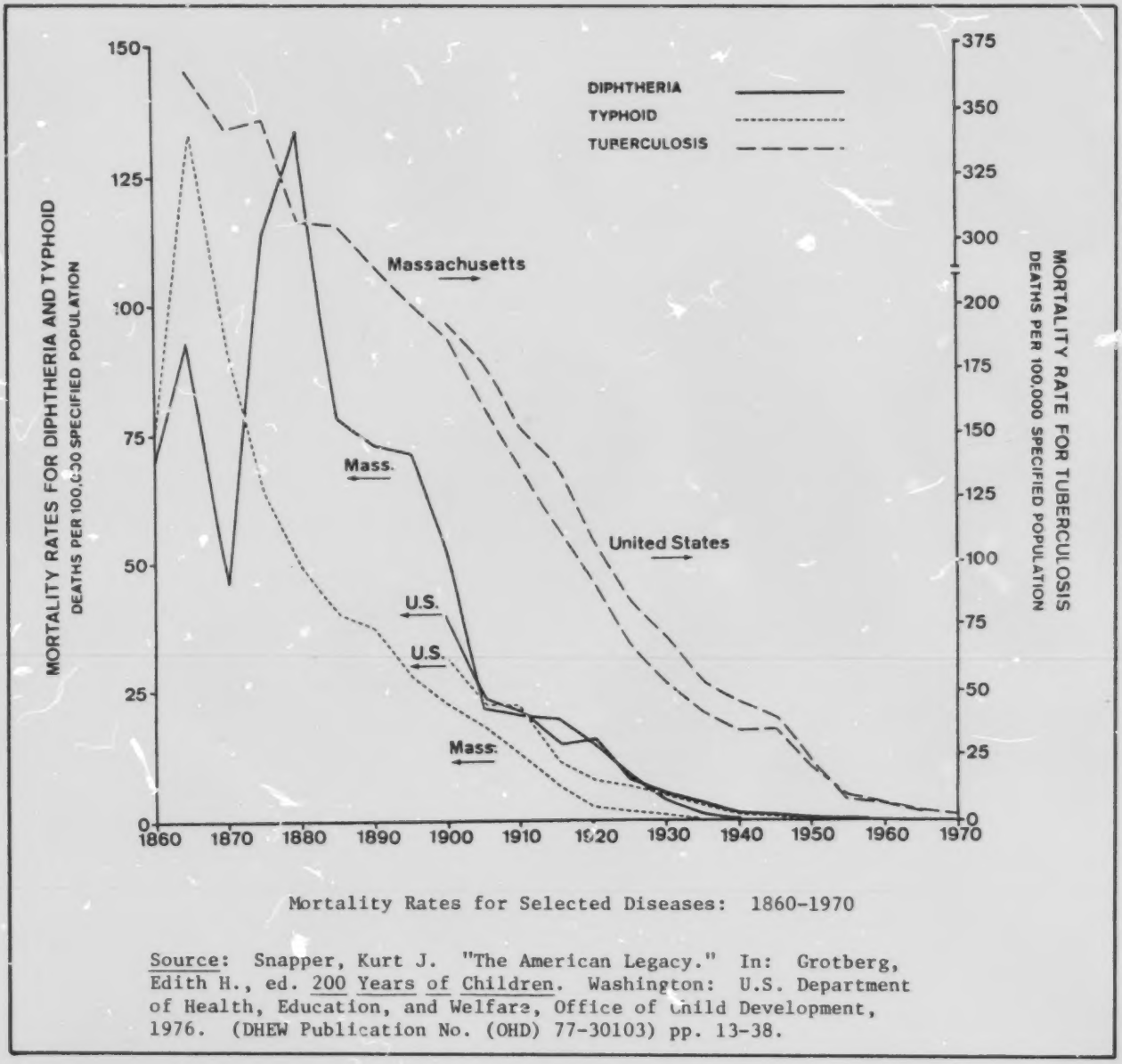
emotional or mental health problems. Although services may be available, studies and data suggest that there are several factors which determine whether services are in fact received, and that many needs of children go unmet. Handicapping conditions and mental health will be discussed more fully later in this chapter, following the sections on physical health and nutrition.

Physical Health

As discussed in Chapter 1, falling infant mortality rates have in part been responsible for dramatic increases in life expectancy. Despite continuing disparities among ethnic groups in health care, services, and infant mortality, all groups are enjoying much greater life expectancies than they did in the early 1900s. Prenatal care and reductions in mortality rates for childhood diseases have contributed to reductions in mortality rates and increased life expectancy.

Reduction in mortality rates for childhood and certain other diseases has also been dramatic and is illustrated in Exhibit 4-1 for selected diseases. (The earliest data are for Massachusetts only; these data are not strictly comparable to more recent data, but do provide an approximate indication of the decline.) Once common, especially among children, polio, measles, mumps, rubella, and diptheria are no longer the killers and cripplers of children they once were.

Due in part to falling infant mortality rates, life expectancies at birth have increased greatly for all groups. Reductions in death rates for a variety of diseases have also led to increased life expectancies. The extent of this decline is illustrated in Exhibit 4-1 for diptheria, typhoid, and tuberculosis. (The earliest available data are for Massachusetts only; these data are not strictly comparable to U.S. data for more recent years.)



Mortality Rates for Selected Diseases: 1860-1970

Source: Snapper, Kurt J. "The American Legacy." In: Grotberg, Edith H., ed. 200 Years of Children. Washington: U.S. Department of Health, Education, and Welfare, Office of Child Development, 1976. (DHEW Publication No. (OHD) 77-30103) pp. 13-38.

EXHIBIT 4-1

On the negative side, there is concern that some of these diseases may return because of falling immunization rates among children. Other health problems, also preventable, have continued to increase. Some of these

preventable problems are related to nutrition and will be discussed in the following section. Other diseases, which are sexually transmitted, are becoming more prominent as health problems--for infants and children as well as for adolescents and adults.

Although Exhibit 4-2 shows that congenital syphillis has continued to decline, from over 5,400 reported cases (all ages) in 1957 to about 760 cases in 1976, the number of cases and rate of infection for gonorrhea has continued to increase. In 1974 there were about 874,000 cases and the infection rate was 420.1 per 100,000 persons. In 1976 there were over 1 million cases and the infection rate increased to 478.1. These case and rate increases between 1974 and 1976, while themselves striking, are but part of a long-term trend, as shown in Exhibit 4-3. From the data presented in Exhibit 4-3, it is apparent that gonorrhea has increased by almost 400% in terms of number of cases and by over 300% in terms of rate of infection.

One article referred to venereal disease (Franck and Hart, 1977) as the "neglected epidemic" and argued that, in comparison to its costs, it was not given sufficient attention by DHEW. In addition to syphillis and gonorrhea, other serious sexually transmitted diseases (STDs) are being monitored by the Center for Disease Control. One of the most serious of these other sexually transmitted diseases is genital herpes. Genital herpes, a virus related to the one causing cold sores, has been implicated in a variety of medical problems including birth defects. The incidence of genital herpes is uncertain: one "very low" estimate is 300,000 persons, and higher estimates place the number of cases at 10 to 20 million. A variety of other STDs, totalling millions of new cases annually, have been identified and are being monitored.

Reported Cases of Congenital Syphilis by Age*: Selected Years 1957-1976

Year	Age Group					
	0-1 Years	1-4 Years	5-9 Years	0-9 Years	10 Years and Over	Grand Total
1957						
Cases	180	79	190	449	5,003	5,452
Percent	3.3	1.4	3.5	8.2	91.8	100.0
1965						
Cases	373	59	44	476	3,029	3,505
Percent	10.6	1.7	1.3	13.6	86.4	100.0
1969						
Cases	277	57	25	359	1,864	2,223
Percent	12.5	2.6	1.1	16.1	83.8	100.0
1970						
Cases	300	44	13	357	1,546	1,903
Percent	15.8	2.3	.7	18.8	81.2	100.0
1971						
Cases	400	61	26	487	1,560	2,047
Percent	19.5	3.0	1.3	23.8	76.2	100.0
1972						
Cases	422	17	20	459	1,473	1,932
Percent	21.8	.9	10.3	23.7	76.2	100.0
1973						
Cases	356	48	10	414	1,236	1,650
Percent	21.6	2.9	.6	25.1	74.9	100.0
1974						
Cases	307	79	11	397	937	1,334
Percent	23.0	5.9	.8	29.8	70.2	100.0
1975						
Cases	221	36	11	268	756	1,024
Percent	21.6	3.5	1.1	26.2	73.8	100.0
1976						
Cases	170	16	11	197	567	764
Percent	22.2	2.1	1.4	25.8	74.2	100.0

*Approximately 95% of congenital cases are reported by age. Cases not reported by age have been prorated according to known ages.

Tabulations based on: Center for Disease Control. VD Fact Sheet 1974 (Edition 31, DHEW Publication No. (CDC) 75-8195). Atlanta, GA, Table 4B; Center for Disease Control. VD Fact Sheet 1975 (Edition 32, DHEW Publication No. (CDC) 76-8195). Atlanta, GA, Table 8A; Center for Disease Control. VD Fact Sheet 1976 (Edition 33, DHEW Publication No. (CDC) 77-8195). Atlanta, GA, Table 8A.

EXHIBIT 4-2

Reported Cases of Venereal Disease: 1963-1976*

Year	Syphilis		Gonorrhea	
	Number of Cases	Rate	Number of Cases	Rate
1963	128,450	69.3	270.076	145.7
1964	118,247	62.9	290,603	154.5
1965	113,018	59.7	310,155	163.8
1966	110,128	57.1	334,949	173.6
1967	103,546	53.2	375,606	193.0
1968	98,195	49.9	431,380	219.2
1969	96,679	48.1	494,227	245.9
1970	87,934	43.8	573,200	285.2
1971	94,383	46.5	624,371	307.5
1972	95,076	46.3	718,401	349.7
1973	90,609	43.9	809,681	392.2
1974	84,164	40.4	874,166	420.1
1975	82,397	39.3	945,945	451.1
1976	76,736	36.3	1,011,014	478.1

*Rate per 100,000 population. Syphilis cases include all stages, and stage not reported.

Sources: Center for Disease Control. VD Fact Sheet 1974 (Edition Thirty-One, DHEW Publication No. (CDC) 75-8195). Atlanta, Georgia, Table 3.; Center for Disease Control. VD Fact Sheet 1975 (Edition Thrity-Two, DHEW Publication No. (CDC) 76-8195). Atlanta, Georgia, Table 3.; Center for Disease Control. VD Fact Sheet 1976 (Edition Thirty-Three, DHEW Publication No. (CDC) 77-8195). Atlanta, Georgia, Table 3.

EXHIBIT 4-3

These diseases have a variety of consequences. For adults, consequences can include sterility, liver damage, arthritis, meningitis, heart disease, mental illness, and death. These are cited in a booklet from the National Institute of Allergies and Infectious Diseases (NIAID). Franck and Hart note that they pose a particular threat to children because "...the most significant characteristic shared by a majority of the STDs is their potential for damage to fetuses and the newborn. Risks include miscarriages, premature and stillbirth, serious urogenital infections, mental retardation, blindness and other congenital defects." Franck and Hart cite testimony and estimate that such diseases are "directly responsible for the death and/or lifelong disability of an estimated 100,000 babies and young women of child-bearing age annually."

More troublesome in the long run is the fact that certain of these diseases are resistant to currently available drug treatment. The symptoms of genital herpes infections can be relieved, for example, but the disease itself cannot be cured. More generally, treatment does not provide immunity--which is to say that cured persons can be re-infected. Moreover, there are new and more resistant strains for which penicillin is largely or wholly ineffective and for which new antibiotics are being sought. For example, Franck and Hart state that gonorrhea used to require a dosage of 200,000 units of penicillin--but that the dosage is currently nearly 5 million units.

Current federal legislation provides for grants to state and local health departments, and, though some money is available for education, funds may not be used for diagnostic or treatment purposes. Franck and Hart indicate that family planning clinics (used by 4 million sexually active women annually) are a possible point of control--except that federal funds are

restricted to state and local health departments. From a preventive point of view there is considerable ignorance and resistance; condoms, for example, offer some protection and have greatly reduced the rate of gonorrhea in Sweden. In the United States, however, several states restrict or prohibit their public display.

STDs are not alone among medical problems which could be more effectively prevented rather than treated. A number of critics have cited a tendency to focus on treatment rather than on prevention as one reason for soaring health costs. In a recent article by Califano (1977), costs of the health care industry were cited as $139 billion in 1976--making it the third largest industry in the U.S. (behind construction and agriculture). He also cites projections for a doubling of total health costs by 1980, with hospital costs of Medicare and Medicaid doubling even before that, and a rise in health care costs at a rate 2-1/2 times that of the cost of living.

Califano cites a number of problems with U.S. health care, including underserved populations and areas, lack of health insurance for many Americans, lack of competition, and inadequate planning at state and local levels, among others. He also cites the fact that much of our medical resources are focused inefficaciously on treatment rather than prevention. As stated by Califano: "...with little incentive to be cost-effective in the use of skills and resources, it is no wonder that our present health-care system emphasizes treatment of illness rather than prevention of illness." He argues that the leading killers today "...are often caused by people's lifestyles or by hostile influences in the environment" such as accidents, alcoholism, cigarette smoking, and obesity.

Major medical programs targeted on children, youth, and families are the Medical Assistance Program and the Maternal and Child Health Services program. The Medical Assistance Program (13.714), known as Medicaid, within the new Health Care Financing Administration, awards formula grants to the states for the purpose of providing medical services to the categorically needy (recipients of cash assistance) and to the medically needy. State and local welfare agencies operating under an approved state plan must provide the needy with in- and out-patient hospital services; other laboratory and x-ray services; skilled home nursing services; home health services for persons over 21; family planning services; and Early Periodic Screening Diagnosis and Treatment services for persons under 21. States receive funds quarterly, based on a formula which relates the state's per capita income to national per capita income. Needy applicants requiring medical assistance may apply at any time, provided they meet any of the following criteria: over 65, blind, disabled, or members of Families with Dependent Children; some persons under age 21 may be eligible to apply. In fiscal year 1977, it is estimated that 24,676,000 persons received medical assistance at a cost of $10,229,318,000; in fiscal year 1976, 23,199,000 persons received assistance at a cost of approximately $8,261,993,000; and in fiscal year 1978, it is estimated that 25,000,000 persons will be served by the program for approximately $11,816,000,000.

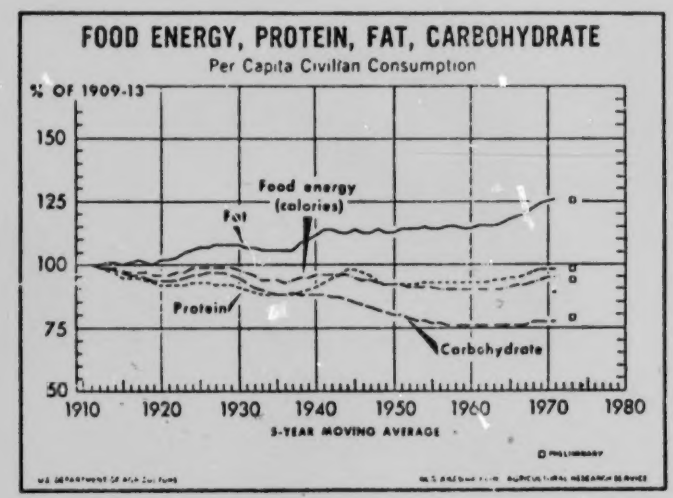
The Maternal and Child Health Services program (13.232) of HEW's Health Services Administration is designed to reduce maternal and infant mortality, to improve the health of mothers and children, to reduce the incidence of mental retardation and other handicapping conditions caused by complications of childbearing, and to promote the dental health of children, particularly in rural areas and in areas with concentrations of low-income families. Increased emphasis is being given to family planning services, infant intensive care, and

comprehensive, rather than emergency or episodic, care of children and youth. Formula grants are made to the state health agencies for the provision of health services and the purchase of services and care from hospitals and other providers; some project grants are also available to the states and to institutions of higher learning. Services are provided to mothers, infants, and children in need of health care, and to trainees in the health professions. It is estimated that 1,970,000 women received services in fiscal year 1977, and that 1,865,000 children attended well-clinics. Comprehensive health care was provided to approximately 632,000 mothers and 171,500 infants. During fiscal year 1977, an estimated 1,220,000 women received family planning services. In fiscal year 1976, 993,000 children received dental care under the program.

Nutrition

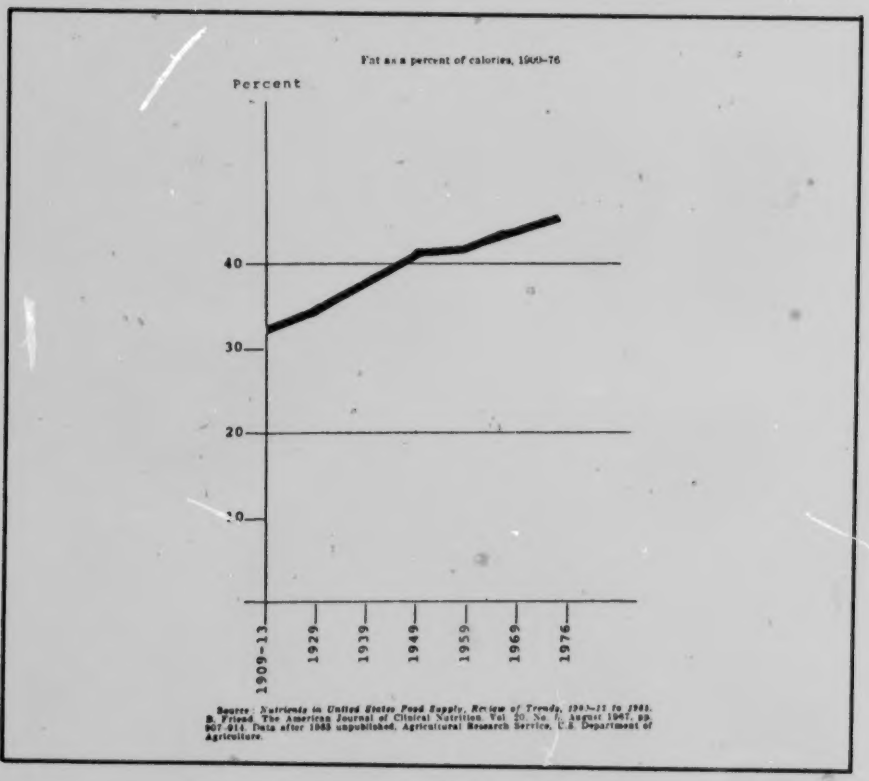
As noted in the 1975 report on the status of children, adequacy of nutrition in the United States is not primarily a problem of low income; true malnutrition is virtually nonexistent in this country. However, poor nutrition and poor nutritional habits are found in all income groups, and, over the years, have become perhaps typical for most segments of our society. Trends are discussed in "Dietary Goals for the United States," which was prepared by the staff of the Senate Select Committee on Nutrition and Human Needs, headed by Senator McGovern. Generally, their findings and report reinforce previous studies.

Exhibit 4-4 indicates how fat consumption has increased and how carbohydrate consumption has decreased. Thus, since the early 1900s, fat consumption has increased by over 25%. Reflecting this same trend, Exhibit 4-5 indicates a steady rise in fat intake expressed as a percentage of total caloric intake. Thus, the rise in Exhibit 4-5 is due both to the increased fat consumption and the decrease in carbohydrate intake.



Source: "Changes in Nutrients in the U.S. Diet Caused by Alterations in Food Intake Patterns," B. Friend. Agricultural Research Service. U.S. Department of Agriculture.

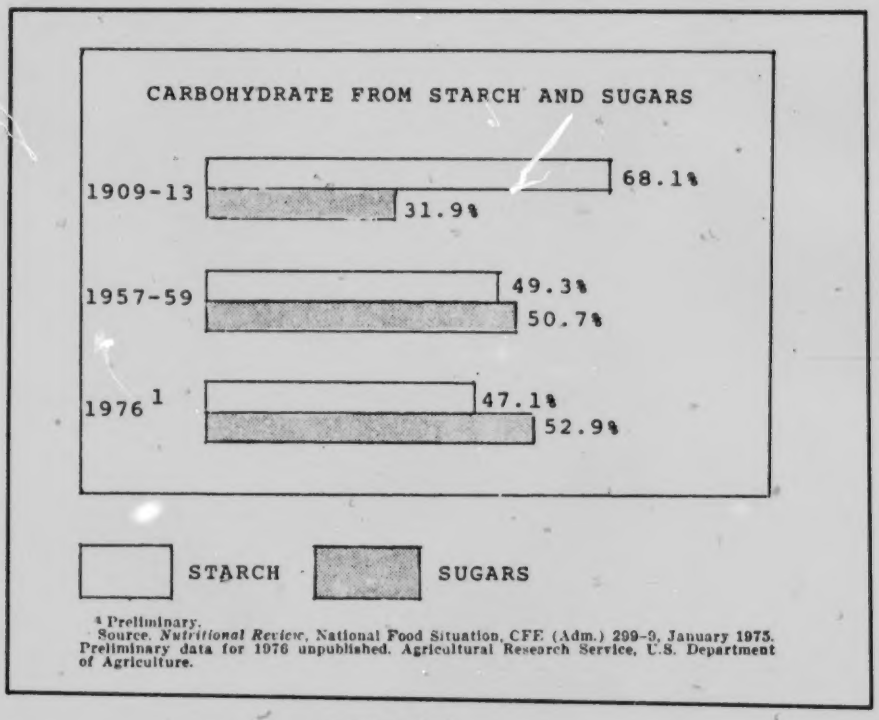
EXHIBIT 4-4



Source: *Nutrients in United States Food Supply, Review of Trends, 1909-11 to 1965.* B. Friend. The American Journal of Clinical Nutrition. Vol. 20, No. 8, August 1967, pp. 907-911. Data after 1965 unpublished, Agricultural Research Service, U.S. Department of Agriculture.

EXHIBIT 4-5

Another longe-range trend is shown in Exhibit 4-6, which indicates a reversal in the intake of carbohydrates between starches (complex carbohydrates) and sugars. The Committee's report suggests that the reversal may be attributable in part to "...the rise in real income, permitting a movement away from diets high in greens, beans, and whole grains, which had been enforced by economics."



[1] Preliminary.
Source. *Nutritional Review*, National Food Situation, CFE (Adm.) 299-9, January 1975. Preliminary data for 1976 unpublished. Agricultural Research Service, U.S. Department of Agriculture.

EXHIBIT 4-6

As noted by McGovern, the Committee's report was the first such comprehensive statement prepared by any branch of the government. He also noted that there is general public confusion about good diets and eating patterns and that: "The simple fact is that our diets have changed radically within the last 50 years, with great and often very harmful effects on our

health. These dietary changes represent as great a threat to public health as smoking. Too much fat, too much sugar or salt, can be and are linked directly to heart disease, cancer, obesity, and stroke, among other killer diseases. In all, six of the ten leading causes of death in the United States have been linked to our diet."

The report recommends six dietary goals for Americans. They are:

1. Increase carbohydrate consumption to approximately 55 to 60% of caloric intake. (Americans are urged to eat more fruits, vegetables and whole grains.)

2. Reduce overall fat consumption from 40% to 30% of caloric intake. (This basically means eating less red meat and more fish and poultry.)

3. Reduce saturated fat consumption to 10% of the daily caloric intake and substitute some poly-unsaturated and mono-unsaturated for saturated fat to equal 10% caloric intake for each. (For example, drink nonfat milk instead of whole milk.)

4. Reduce cholesterol consumption to 300 milligrams per day. (Eat fewer eggs, butterfat, and other high cholesterol foods.)

5. Reduce sugar consumption by approximately 40% so that it is 15% of the total daily caloric intake. (Avoid sugar-coated cereal, soft drinks, store-bought baked goods, etc.)

6. Reduce salt consumption by 50 to 85% -- to about 3 grams per day. (Americans get enough salt without adding any to their food.)

These goals are expressed in Exhibit 4-7. Note that both figures total to 100% of one's caloric intake, and that indicated percentages refer to percent of total caloric intake. Thus, for example, the recommendation is that 30% of one's caloric intake should be provided by fats, rather than the 42% currently provided by fats.

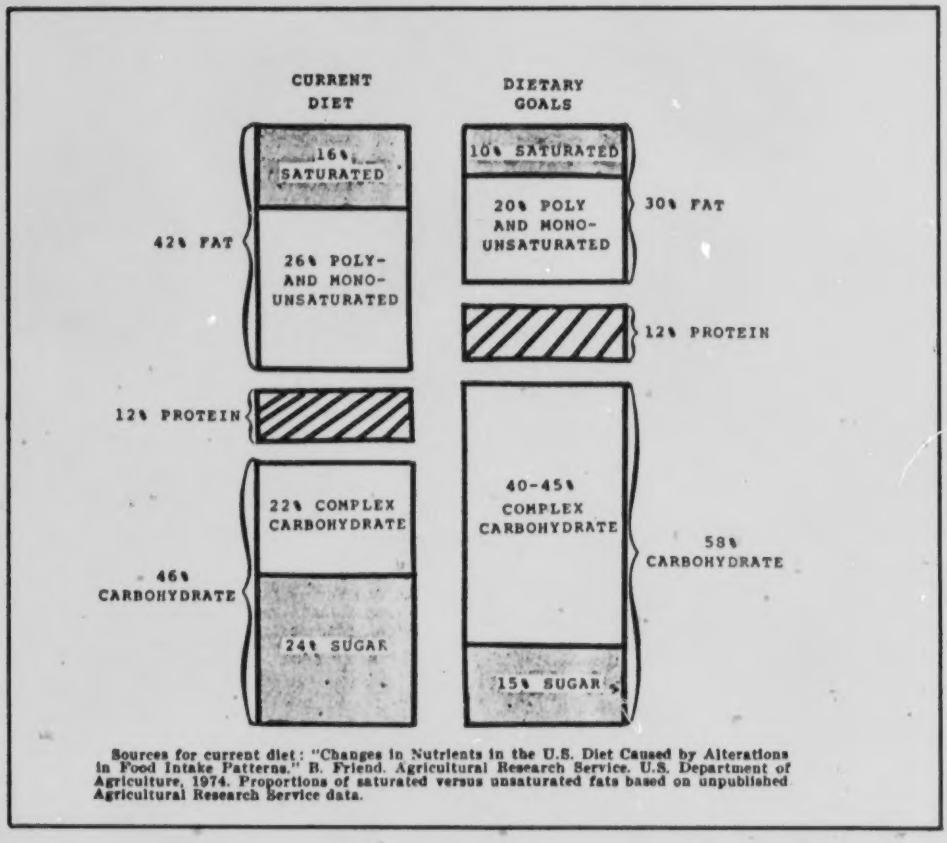

CURRENT DIET
DIETARY GOALS
16% SATURATED
42% FAT
26% POLY- AND MONO- UNSATURATED
12% PROTEIN
22% COMPLEX CARBOHYDRATE
46% CARBOHYDRATE
24% SUGAR
10% SATURATED
20% POLY AND MONO- UNSATURATED
30% FAT
12% PROTEIN
40-45% COMPLEX CARBOHYDRATE
58% CARBOHYDRATE
15% SUGAR
Sources for current diet: "Changes in Nutrients in the U.S. Diet Caused by Alterations in Food Intake Patterns." R. Friend. Agricultural Research Service. U.S. Department of Agriculture. 1974. Proportions of saturated versus unsaturated fats based on unpublished Agricultural Research Service data.

EXHIBIT 4-7

Although the present report cannot discuss each of these dietary goals individually, the reader is referred to the full Committee report (available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at $.95 per copy).

While there has been much delay in formulation of dietary standards, and no doubt will be significant further governmental and industrial delays, the stakes are high for all age groups, particularly children and youth. As noted by Senator Percy, the ranking minority party member, the Committee report should act as more than "a practical guide to promote good eating habits" and should also "serve as a catalyst for government and industry action

to facilitate the achievement of the recommended dietary goals." In the previous discussion of health status in this report, prevention rather than treatment was emphasized. The Committee's report also emphasizes the preventive nature of good diet and nutrition.

For the purposes of the present report, the benefits of good dietary practices most directly related to children are considered. The information in Exhibit 4-8 is adapted from "Benefits from Human Nutrition Research" (prepared by Dr. C. Edith Weir from a study conducted at the direction of the Agricultural Research Policy Advisory Committee, USDA, and reproduced in the Select Committee's report).

Health Problem	Potential Savings from Improved Diet
Infant Mortality	Up to 50% reduction
Congenital birth defects	Up to a 20% reduction
Dental Health	Up to a 50% reduction in incidence severity and expenditures
Eyesight	Up to a 20% reduction in blindness or use of corrective lenses
Cancer	Up to a 20% reduction in incidence and rates
I.Q. in 70-80 range	Raise I.Q. by 10 points for persons with I.Q. 70-80

EXHIBIT 4-8

Education is an important factor in relation to nutrition, diet, and health problems such as those cited above. However, it typically is not provided to most persons--including parents and prospective parents--and much nutritional "education" is provided through television. Television, of

course, reaches all income, ethnic, and age groups. Studies indicate that the American people are bombarded with advertisements concentrating on the foods and drinks low in nutrients but high in calories. One study cited that only about 25 percent of advertisement time dealt with nutritious foods. On the sample weekend, the study found 85 percent concentration on foods high in fat, saturated fat, cholesterol, sugar and/or salt, while no fresh fruits or vegetables were advertised.

How can the dietary goals be achieved? The Select Committee has several recommendations. A public nutrition education program should be formed involving the schools, federal food assistance programs, the Extension Service of the Department of Agriculture and the mass media. The Committee recommends that Congress require food labeling to include percent and type of fats, percent sugar, milligrams of cholesterol, milligrams of salt, caloric content, and food additives. Another recommendation is better food processing methods and improved institutional and home meal preparation to reduce risk factors in the diet. Congress is also advised to increase funding for research in human nutrition.

While there is a lack of an overall dietary policy and programs (primarily educational) to ensure good nutritional practices, the need for adequate nutrient intake has been recognized and reflected in national programs. One of these is the Food Stamp Program, which provides coupons (at a cost less than face value) to be redeemed for foodstuffs.

The WIC Program, or Special Supplemental Food Program for Women, Infants, and Children (10.557), of USDA's Food and Nutrition Service supplies supplemental nutritious foods to pregnant or lactating women for as long as six months post-partum and to infants and children up to five years of age when these individuals

have been identified as nutritional risks because of inadequate income and inadequate nutrition. Cash grants are made to state health agencies or comparable agencies and to recognized Indian tribes, bands, or groups in order to make foods available through local public or private nonprofit health agencies. These local agencies are eligible to participate in the program if they provide health services free or at reduced cost to residents of low-income areas, if they serve a population at nutritional risk, and if they have the ability to perform the required tests and measurements and to maintain adequate medical records. Funds must be expended to purchase supplemental foods or to redeem vouchers issued for that purpose. Eligibility criteria for participating women, infants, and children include residence in an approved project area, eligibility for health treatment at less than the customary full charge by the local agency, and determination of nutritional risk by competent professionals on the agency's staff. In fiscal year 1976, 49 states, 13 Indian agencies, Puerto Rico, and the Virgin Islands had operating WIC Programs, with a peak caseload of 701,558. In contrast, 48 states, 2 Indian agencies, Puerto Rico, and the Virgin Islands participated in fiscal year 1975, with a peak caseload of 497,000.

Another program is designed for children in schools: the National School Lunch Program (10.555). The program has been reaching more than 20 million participating students annually, as indicated in Exhibit 4-9.

In many instances, however, good nutrition and diet are ultimately a family matter. Some families are choosing to buy food free of additives (such as nitrite, which is linked to cancer) from stores supplying them; another family bakes its own breads, adding less sugar, fat, and salt than in commercially available breads. Moreover, at least one school system has added to its food service a campaign to involve students in planning and

Number of Children Participating in the
National School Lunch Program 1967-1976*

Year	Number of Children Participating	Number of Children Receiving Free/Reduced Price Lunches
1968	20.6	2.7
1969	22.1	3.3
1970	23.1	5.2
1971	24.6	7.3
1972	24.9	8.3
1973	25.2	9.0
1974	24.9	9.4
1975	25.3	10.6
1976	25.9	11.2

*Numbers in millions
Data are for the peak month of fiscal year, and are based upon a preliminary report.
Source: Food and Nutrition Service Program Reporting Staff. Annual Statistical Review Preliminary Report: Food and Nutrition Programs Fiscal Year, 1974 (FNS-129). December, 1974, page 5. Updates supplied through personal communication.

EXHIBIT 4-9

evaluating the lunches. They are also aiming to serve the food attractively to the students. The theme of the year is "Bite Right" and brochures are sent home with nutritional information for parents. Parents are also invited to a tasting party at each neighborhood school where nutritional analyses of typical lunches are discussed as well as a sampling of the foods.

Handicapping Conditions

No single census of handicapped children and youth exist, and estimates by type of condition vary. The Bureau of Education for the Handicapped, within the Office of Education, has based some overall estimates of incidence on data and estimates compiled from several different sources. Based upon the Bureau's 1976 estimates, a total of over 7.8 million children and youth 0-19 had some form of handicapping condition. Their estimates place the percentage of preschool children 0-5 with a handicapping condition at about 6%; the estimate for school-age children 6-19 is higher, about 12%.

Exhibit 4-10 shows the estimated percentage of children 0-19 having each type of handicapping condition. For example, an estimated 3.5% of the children 0-19 are speech impaired, making it the most common form of

The Estimated Percentages of 0-19 Children with Selected Handicaps

Percent	Type of Handicap
3.50	Speech impaired
2.30	Mentally retarded
3.00	Learning disabled
2.00	Emotionally disturbed
.50	Crippled and other health impaired
.075	Deaf
.50	Hard of hearing
.10	Visually handicapped
.06	Deaf blind and other health impaired

Source: Adapted from unpublished Bureau of Education for the Handicapped projected estimates for 1975-1976.

EXHIBIT 4-10

handicapping condition. However, the estimates also show substantial percentages of children who have learning disabilities (3.0%), who are mentally retarded (2.3%), and who are emotionally disturbed (2.0%).

The estimated percentage of children who are served varies widely, depending upon the age of the child and the type of handicapping condition. The Bureau estimates the percentage of preschool children who are served as 38%, and the percentage of school-age children (6-19) who are served as 58%. Overall, the percentage of children 0-19 who are served is estimated at 55%; 45%, or about 3.6 million children, are unserved. These estimates are shown in Exhibit 4-11.

Estimated Number of Handicapped Children Served and Unserved

Age	Total Served and Unserved	Unserved	Percent Served
0-19	7,887,000	3,577,000	55%
6-19	6,700,000	2,840,000	58%
0-5	1,187,000	737,000	38%

Source: Adapted from unpublished Bureau of Education for the Handicapped projected estimates for 1975-1976.

EXHIBIT 4-11

Exhibit 4-12 indicates the wide variability in the estimated percentage of children who are served, by type of handicapping condition. Of the four most frequent types of conditions (speech impairment, mentally retarded, learning disabled, emotionally disturbed), two types are apparently not widely served. The Bureau's estimates are that only 13 percent of those

Estimated Number of Handicapped 0-19 Children Served and Unserved by Type of Handicap

Type of Handicap	Total Served and Unserved	Unserved	Percent Served	Percent Unserved
Speech Impaired	2,293,000	273,000	88	12
Mentally Retarded	1,507,000	157,000	90	12
Learning Disabilities	1,966,000	1,706,000	13	87
Emotionally Disturbed	1,310,000	1,055,000	19	81
Crippled and Other Health Impaired	328,000	73,000	78	22
Deaf	49,000	4,000	92	8
Hard of Hearing	328,000	262,000	20	80
Visually Handicapped	66,000	23,000	65	35
Deaf-Blind and Other Multihandicapped	40,000	24,000	40	60

Source: Adapted from unpublished Bureau of Education for the Handicapped projected estimates for 1975-1976.

EXHIBIT 4-12

with learning disabilities and 19% of those with emotional disturbances were served. These percentages represent approximately 1.7 children with learning disabilities and 1 million emotionally disturbed children who were not served.

The Crippled Children's Services (13.211) provides services, especially in rural and low-income areas, to crippled children and children with conditions which lead to crippling. During FY '77, 560,000 crippled persons under 20, including 97,000 with multiple handicaps and 41,000 with congenital heart disease, were provided services. Maternal and Child Health Services (13.232) provides services to low-income and rural children with physical handicaps, which include screening, diagnosis, treatment, and follow-up services. It seeks to reduce the incidence of mental retardation through improving prenatal and postpartum care of mothers and infants. This program also supports clinics for mentally retarded children which provide diagnostic, counseling, treatment, and follow-up services. Comprehensive services for the mentally retarded are provided through the Developmental Disabilities-Basic Support program (13.630).

Other problems related to handicapping conditions excluding educational programs include Maternal and Child Health Research (13.231), Maternal and Child Health Training (13.233), Mental Health-Children's Services (13.259), Handicapped Early Childhood Assistance (13.444), Handicapped Innovative Programs—Deaf-Blind Centers (13.445), the Office for Handicapped Individuals (13.603), Developmental Disabilities-Special Projects (13.631), and Developmental Disabilities-Demonstration Facilities and Training (13.632).

Mental Health

Precise estimates of the number of children and youth with mental health problems do not exist, in part because of varied reporting procedures and lack of uniformity and consistency in classification schemes. The total number of persons is, however, estimated to be large. For example, the National Association of Mental Health estimates that, overall, one person in ten experiences some type of mental illness, and that the incidence for children is about the same as for the overall population. The Association also estimates that 3% of the children and youth under 18 suffer from severe emotional problems, and 8% have less severe emotional problems. A slightly different estimate of the extent of mental illness is provided by the President's Committee on Mental Health, which recently estimated that 15% of children suffer from some type of mental illness.

Children with mental health problems have need of special services, which may be rendered through the school system, special child care programs and services, hospitals, community mental health centers, or through residential or other facilities on an inpatient or outpatient basis. However, the percentage of persons--children, youth, and adults--who actually receive services is estimated to be small; the National Institute of Mental Health estimates that only 10% of those who need services receive them.

Exhibit 4-13 provides a description of the services actually rendered to children under 18, based on estimates of the National Institute of Mental Health. A total of 655,000 admissions were recorded for all types of psychiatric facilities in 1975. Most were rendered on an outpatient basis, and a relatively small percentage were provided through inpatient or residential care facilities.

Patient Admissions Under 18 Years of Age
by Type of Psychiatric Facility: 1975

Type of Facility	Number of Admissions
Inpatient Psychiatric Services	
State and County Mental Hospitals	25,252
Private Mental Hospitals	15,426
General Hospitals Inpatient Psychiatric Units	42,690
Residential Treatment Centers for Emotionally Disturbed Children	12,022
Outpatient Psychiatric Services	358,061
Community Mental Health Centers (Inpatient and Outpatient)	213,607

Source: Personal communication, National Institute of Mental Health.

EXHIBIT 4-13

The Mental Health—Children's Services program (13.259) stimulates innovative approaches to children's mental health problems emphasizing prevention and coordination of community services, and seeks to expand training activities and to broaden resources for children's mental health services. The program provides continuation grants for staffing facilities offering mental health services for children. A grant applicant must be part of, or affiliated with, a community mental health center. If there is no such center, the applicant may be any public or private nonprofit agency providing a full range of mental health services for children and their families. The ultimate recipients of services funded by this program are children and their families residing in the service area, as well as personnel of schools and other community agencies serving children. In fiscal year 1976, 174 staffing grants were issued; approximately 131 were to be awarded in fiscal year 1977 and 100 in 1978.

The Community Mental Health Centers—Comprehensive Services Support program (13.295) operates six grant programs to enable community mental health centers to provide the following services: inpatient, outpatient, day care, and other partial hospitalization services; specialized services for the mental health of children, and for the elderly; consultation and education services; assistance in screening area residents considered for referral for inpatient treatment in state facilities; follow-up care; halfway house services for area residents discharged from mental health facilities; and, if there is a need for them, programs for prevention and treatment of alcoholism and drug abuse, and rehabilitation of alcoholics and drug addicts. Eligibility criteria vary, but in general the community

mental health centers must be public or private nonprofit entities that are part of the state plan for community mental health, in need of the following types of project grant assistance: facilities assistance; planning grants; grants for initial operations; consultation and education services; conversion grants; or financial distress grants. All persons who reside in the designated area have priority for services from the centers. During fiscal year 1976, 32 planning grants, 42 initial operations grants, and 25 financial distress grants were awarded. An estimated 20 planning grants, 159 initial operations grants, 97 consultation and education grants, 73 conversion grants, and 41 financial distress grants were to be funded for fiscal year 1977. It is possible that 253 initial operations grants, 97 consultation and education grants, 33 conversion grants, and 29 financial distress grants will be awarded in fiscal year 1978.

CHAPTER 5: EDUCATION STATUS AND PROGRAMS

The American education system has been successful in providing an education to the large majority of children and youth. The extent of this success is illustrated by a few key indicators. One of these indicators is the illiteracy rate. Many of the immigrants to the United States in the early 1900s were unable to read or write in any language; that is, they were illiterate. But the illiteracy rate for immigrants fell to a very low rate after about 1930. The illiteracy rate for blacks was high and estimated at about 80% in the late 1800s, but it has fallen dramatically and was estimated at 7.5% for persons over 14 in 1959 and 3.6% in 1969 (the most recent year for which data are available). For whites, the corresponding percentages for 1959 and 1969 were 1.6% and 0.7%.

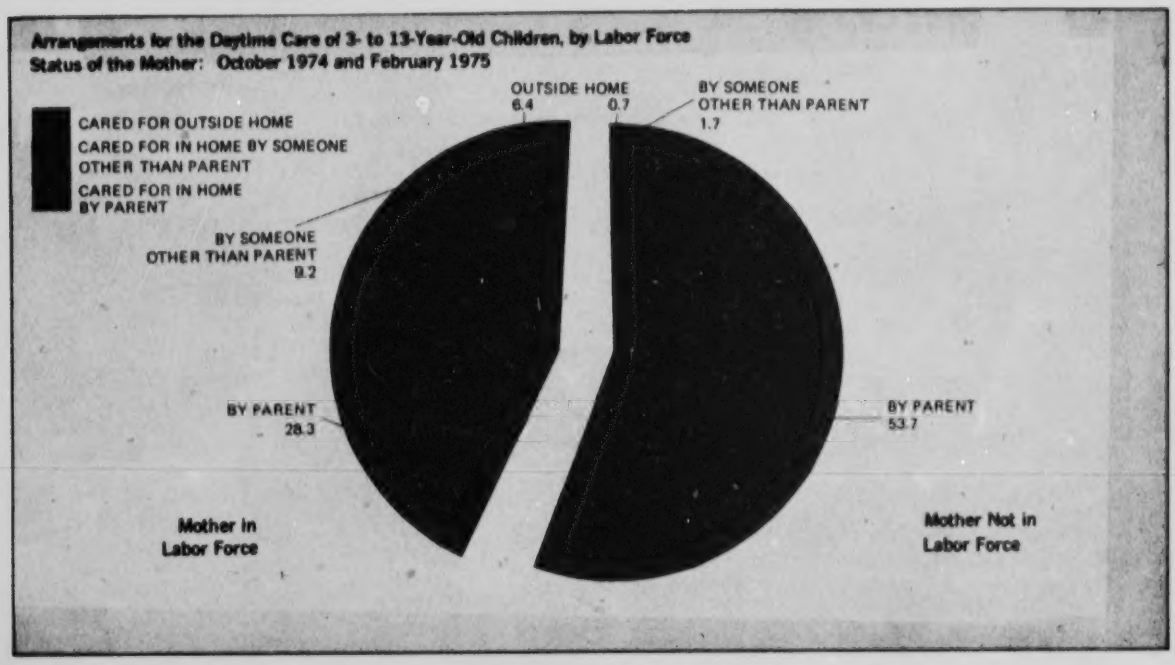
Another indicator of educational progress is the median years of school completed. In 1910 one estimate placed the median number of school years completed (for persons over 25) at 8.1, but in 1976 the number of school years completed had increased to 12.4. Other indicators include declining drop out rates, an increase in the percentage of persons completing high school, and expanded participation in secondary education programs.

The overall gains made in education serve to highlight some of the educational needs of particular population groups. These populations include, among others, children with various handicapping conditions, minority groups, low-income groups, Native Americans, persons of Spanish origin or who are Spanish speaking, even preschool children. Although this chapter will emphasize preschool children and programs, the educational

needs and programs for other groups will also be discussed later in this chapter.

Preschool Children and Programs

Divorce, female-headed families, working mothers and other factors discussed in preceding chapters have tended to increase the demand for child care arrangements, especially for those which have an educational component. Child care arrangements depend upon whether the mother is in the labor force. If she is, the child is much more likely to be cared for by someone other than a parent than if she is not. As shown in Exhibit 5-1, a parent provides care 53.7% of the time when the mother is not in the labor force and 28.3% of the time when she is.


Arrangements for the Daytime Care of 3- to 13-Year-Old Children, by Labor Force Status of the Mother: October 1974 and February 1975
CARED FOR OUTSIDE HOME
CARED FOR IN HOME BY SOMEONE OTHER THAN PARENT
CARED FOR IN HOME BY PARENT
OUTSIDE HOME 6.4
BY SOMEONE OTHER THAN PARENT 9.2
BY PARENT 28.3
Mother in Labor Force
OUTSIDE HOME 0.7
BY SOMEONE OTHER THAN PARENT 1.7
BY PARENT 53.7
Mother Not in Labor Force

Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C.: U.S. Government Printing Office, October 1976, page 54.

EXHIBIT 5-1

Exhibit 5-2 provides a more detailed description of the child care arrangements made by working mothers, and allows a comparison of the 3-6 and 7-13 age groups. Care is less likely to be provided by a parent to a 3-6 year old than to a 7-13 year old. For the younger age group, 58.0% of the arrangements involve care by a parent; for the older age group, 66.1% of the arrangements involve care by a parent. Care is provided by a nonrelative (including care provided through day care centers) in 18.7% of the arrangements for children 3-6, but in only 3.9% of the arrangements for the 7-13 age group.

Arrangements for Daytime Care of Children With Mothers in the Labor Force, by Age: October 1974 and February 1975
OUTSIDE HOME
INSIDE HOME
OTHER
BY NONRELATIVE* 18.7
OTHER 2.0
BY RELATIVE 11.3
BY NONRELATIVE* 2.8
BY PARENT 58.0
BY RELATIVE 7.2
Children 3-6 Years Old (February 1975 Survey)
BY NONRELATIVE* 3.9
BY RELATIVE 3.0
OTHER 1.8
BY NONRELATIVE* 2.6
BY PARENT 66.1
BY RELATIVE 9.5
CHILD CARED FOR SELF 13.1
Children 7-13 Years Old (October 1974 Survey)

*INCLUDING DAYCARE CENTERS

Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C.: U.S. Government Printing Office, October 1976, page 54.

EXHIBIT 5-2

Exhibit 5-3 shows recent estimates about day care facilities of the Administration of Children, Youth, and Families, within the Office of Human Development Services. These estimates place the total number of day care centers at 18,000 and their estimated capacity at 950,000 children. The total number of family day care homes is estimated at 50,000, and have an estimated capacity of 300,000 children. The total capacity for both day care homes and centers is estimated at 1.25 million children.

Estimated Day Care Facilities: 1976

TYPE OF FACILITY	NUMBER AND CAPACITY	
	NUMBER OF ESTIMATED FACILITIES	ESTIMATED CAPACITY
DAY CARE CENTERS	18,000	950,000
FAMILY DAY CARE HOMES	50,000	300,000

Source: Unpublished data from the Administration on Children, Youth, and Families.

EXHIBIT 5-3

As Exhibit 5-4 shows, enrollments among children 3 and 4 years of age have increased markedly since 1964, from an enrollment rate of 9.5% to an enrollment rate of 31.3% in 1976. Enrollment rates for 5 and 6

School Enrollment Rates by Age: 1964-1976*

YEAR	AGE					
	TOTAL 3-34	3 and 4 YEARS	5 and 6 YEARS	7 to 13 YEARS	14 to 17 YEARS	18 to 19 YEARS
1964	54.5	9.5	83.7	99.0	93.1	41.6
1965	55.5	10.6	84.9	99.4	93.2	46.3
1966	56.1	12.5	85.8	99.3	93.7	47.2
1967	56.6	14.2	87.4	99.3	93.7	47.6
1968	56.7	15.7	87.6	99.1	94.2	50.4
1969	57.0	16.1	88.4	99.2	94.0	50.2
1970	56.4	20.5	89.5	99.2	94.1	47.7
1971	56.2	21.2	91.6	99.1	94.5	49.2
1972	54.9	24.4	91.9	99.2	93.3	46.3
1973	53.5	24.2	92.5	99.2	92.9	42.9
1974	53.6	28.8	94.2	99.3	92.9	43.1
1975	53.7	31.5	94.7	99.3	93.6	46.9
1976	53.1	31.3	95.5	99.2	93.7	46.2

*Civilian noninstitutional population. Rate expressed as number per 100 is specified group.

Sources: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 278, "School Enrollment-Socia and Economic Characteristics of Students: October 1974," (Advance Report), U.S. Government Printing Office, Washington, D.C., February 1975, Table 2; and U.S. Bureau of the Census, Current Population Reports, Series P-2 No. 309, "School Enrollment-Social and Economic Characteristics of Students: October 1976," (Advance Report), U.S. Government Printing Office, Washington, D.C., 1977, Table 2.

EXHIBIT 5-4

years have also increased over this period, from 83.7% to 95.5%. Because of decreasing birth rates, however, enrollment rates for the 3-34 age group have declined slightly.

Exhibit 5-5, which shows the number of children enrolled in nursery school and kindergarten, reflects both the increased enrollment rate of preschoolers and the falling birth rate. Thus, kindergarten enrollment rates have steadily increased, but the number of children enrolling in kindergarten has not changed much between 1967 and 1976. Only nursery school enrollments show a marked increase in enrollments, which in part reflects the tripling of enrollment rates for 3 and 4 year olds shown in Exhibit 5-4. Between 1967 and 1976, the number of nursery school enrollees little more than doubled, from 713,000 to 1,526,000.

Exhibit 5-6 shows that approximately a two-thirds majority of children in nursery school continue to be in private facilities, although the trend has been for public sector enrollments to increase more rapidly than private sector enrollments. But, as Exhibit 5-6 also indicates, declining birth rates led to an actual decrease since 1975 in the number of enrollments in both private and public nursery schools.

The pattern is somewhat different for kindergarten enrollments. Total enrollments were up slightly between 1975 and 1976, from 3,393,000 to 3,490,000. This increase in enrollment was only in the public sector, which, as Exhibit 5-6 indicates, has always accounted for roughly 80% or more of the enrollments. Exhibit 5-6 also suggests that, contrary to the trend for nursery school enrollments, enrollments in private kindergartens have been declining, though irregularly, since the early 1970s or late 1960s.

Preprimary School Enrollment: Nursery School and Kindergarten: October 1967 to October 1976*

Level of School	Year									
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Nursery School	713	816	860	1,096	1,066	1,283	1,324	1,607	1,748	1,526
Kindergarten	3,312	3,268	3,276	3,183	3,263	3,135	3,074	3,252	3,393	3,490

*Numbers in thousands. Civilian noninstitutional population.

Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 309, "School Enrollment-Social and Economic Characteristics of Students: October, 1976 (Advance Report), U.S. Government Printing Office, Washington, D.C., 1977, Table 1.

EXHIBIT 5-5

Preprimary School Enrollment by Type of Control: October 1964-October 1976*

YEAR	CHILDREN ENROLLED IN NURSERY SCHOOLS AND KINDERGARTEN			
	CHILDREN ENROLLED IN NURSERY SCHOOLS		CHILDREN ENROLLED IN KINDERGARTEN	
	NUMBER ENROLLED IN PUBLIC SCHOOL	NUMBER ENROLLED IN PRIVATE SCHOOL	NUMBER ENROLLED IN PUBLIC SCHOOL	NUMBER ENROLLED IN PRIVATE SCHOOL
1964	91	380	2,349	481
1965	127	393	2,439	618
1966	215	473	2,527	588
1967	230	484	2,678	635
1968	262	554	2,709	559
1969	245	615	2,682	594
1970	333	763	2,647	536
1971	317	749	2,689	574
1972	402	881	2,636	499
1973	400	924	2,582	493
1974	423	1,184	2,726	526
1975	574	1,174	2,851	542
1976	476	1,050	2,962	528

*Number in thousands. Civilian noninstitutional population

Sources: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 278, "School Enrollment-Social and Economic Characteristics of Students: October 1974," (Advance Report), U.S. Government Printing Office, Washington, D.C., February 1975, Table 1; and U.S. Bureau of the Census, Current Population Reports, Series P-10, No. 309, "School Enrollment-Social and Economic Characteristics of Students: October 1976," (Advance Report), U.S. Government Printing Office, Washington, D.C., 1977, Table 1.

EXHIBIT 5-6

Educational Attainment

As previously shown in Exhibit 5-4, enrollment rates in the primary grades have been consistently above 99% between 1964 and 1976. Exhibit 5-7 shows modal grade enrollments for 6 year olds and other age groups. Most 6 year olds were of course enrolled in 1st grade, their modal grade. Children below their modal grade were predominantly white, some perhaps held out of school for a year by their parents; and about equal percentages of blacks and whites were enrolled one or more years above their modal grade.

For the older age groups, the percentage of both blacks and whites enrolled in their modal grade decreases, although the decrease in modal grade enrollment is greater for blacks than for whites. As Exhibit 5-7 shows, there is a tendency for more blacks than whites to be enrolled both above and below their modal grade. The largest difference between blacks and whites is in enrollments below modal grade--a difference which is somewhat more pronounced for females than for males. For example, 24.5% black female 13 year olds are one year below modal grade, as compared to 14.5% of the white females (a difference of 10.0%). For male 13 year olds, the difference is only 4.3% (21.6% for whites versus 25.9% for blacks).

Exhibit 5-8 indicates that the percentage of students dropping out of school has generally been higher for blacks than for whites. Nevertheless, the trend between 1967 and 1976 is clearly towards a reduction in drop out rates for both blacks and whites, with especially large decreases in drop out rates occurring for black males. This trend is most evident in the data for the 18-19 year old group. In 1967, the drop out rate for black males was 30.6%, but by 1976 it had fallen to 19.3%. The decrease for black females was much smaller over

Modal Grade Enrollment: October 1975*

AGE	PERCENT ENROLLED							
	2 OR MORE YEARS BELOW MODAL GRADE				1 YEAR BELOW MODAL GRADE			
	WHITE		BLACK		WHITE		BLACK	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
6 YEARS OLD	---	0.2	---	---	7.0	4.8	1.6	3.5
7 YEARS OLD	---	---	---	---	14.3	9.2	19.3	17.0
8 YEARS OLD	0.8	0.7	---	0.4	17.0	12.5	18.1	12.5
9 YEARS OLD	1.5	1.0	0.8	1.2	17.9	11.0	27.3	15.6
10 YEARS OLD	1.8	1.2	2.6	1.4	17.4	10.1	25.9	20.7
11 YEARS OLD	2.4	1.8	4.0	3.1	18.4	11.7	32.4	22.6
12 YEARS OLD	2.3	1.4	8.0	4.4	21.9	13.3	23.7	18.9
13 YEARS OLD	2.9	1.1	4.0	4.4	21.6	14.5	25.9	24.5
AGE	IN MODAL GRADE				1 OR MORE YEARS ABOVE MODAL GRADE			
6 YEARS OLD	83.9	84.5	89.8	85.4	9.2	10.5	8.6	11.0
7 YEARS OLD	77.6	82.2	73.7	72.9	8.1	8.6	7.4	10.1
8 YEARS OLD	76.5	74.9	73.3	77.5	5.6	10.9	8.6	9.2
9 YEARS OLD	72.9	78.7	61.7	71.2	7.9	9.3	10.6	12.8
10 YEARS OLD	72.9	78.1	60.2	65.7	7.9	10.6	11.7	12.1
11 YEARS OLD	71.3	77.5	55.9	65.1	7.9	9.0	7.7	8.8
12 YEARS OLD	68.5	76.1	58.9	65.2	7.3	9.2	8.7	11.5
13 YEARS OLD	68.4	75.2	58.8	62.6	7.2	9.1	10.9	8.5

* Modal grade is defined as: 6 years old, grade 1; 7 years old, grade 2; 8 years old, grade 3; 9 years old, grade 4; 10 years old, grade 5; 11 years old, grade 6; 12 years old, grade 7; and 13 years old, grade 8.

Source: U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 303, "School Enrollment-Social and Economic Characteristics of Students: October 1975," U.S. Government Printing Office, Washington, D.C., 1976, Table 16.

Percent of High School Dropouts 14 to 24 Years Old by Sex and Ethnicity: 1967, 1973, 1974, 1975, and 1976*

Year, Sex and Race	Age				
	Total Persons 14-24 Years Old	14-15 Years Old	16-17 Years Old	18-19 Years Old	20-24 Years Old
1967					
Black Male	23.9	3.5	11.7	30.6	42.6
Black Female	21.8	4.0	14.6	22.0	36.1
White Male	11.6	1.5	7.0	15.4	18.8
White Female	13.1	1.4	9.4	16.3	19.0
1973					
Black Male	17.6	3.1	10.6	27.7	24.9
Black Female	18.9	3.1	10.0	23.0	29.0
White Male	10.4	1.9	8.7	14.1	13.7
White Female	11.3	2.8	9.2	15.2	14.2
1974					
Black Male	16.3	3.9	8.3	26.9	23.6
Black Female	18.1	2.1	12.6	20.2	27.7
White Male	11.0	1.8	9.4	17.4	13.6
White Female	11.0	1.9	9.1	13.9	14.5

CONTINUED ON NEXT PAGE

EXHIBIT 5-8

Percent of High School Dropouts 14 to 24 Years Old by Sex and Race: 1967, 1973, 1974, 1975, and 1976* (continued

Year, Sex and Race	Age				
	Total Persons 14-24 Years Old	14-15 Years Old	16-17 Years Old	18-19 Years Old	20-24 Years Old
1975					
Black Male	18.1	2.4	9.7	27.7	27.9
Black Female	18.9	2.8	10.7	23.4	28.4
White Male	9.9	1.4	7.3	13.7	13.4
White Female	11.0	1.9	9.6	15.6	13.6
1976					
Black Male	16.6	0.5	8.1	19.3	29.6
Black Female	16.2	1.6	10.8	20.7	23.5
White Male	10.9	1.5	7.6	17.1	14.1
White Female	11.2	2.3	9.1	15.4	14.1
Spanish origin	26.1	4.6	15.6	30.7	39.5
Male	24.5	2.7	13.3	32.0	38.6
Female	27.4	6.4	17.7	29.5	40.4

*Percent in specified groups. Dropouts are defined as persons not enrolled in school who did not graduate from high school.

Sources: National Center for Educational Statistics. Digest of Educational Statistics, 1973 Edition (DHEW Publication No. (OE) 74-11103). U.S. Government Printing Office, Washington, D.C., 1974, Table 66; National Center for Educational Statistics. Digest of Educational Statistics, 1974 Edition (NCES 75-210). U.S. Government Printing Office, Washington, D.C., 1975, Table 66; National Center for Educational Statistics. Digest of Educational Statistics, 1975 Edition (NCES 76-211). U.S. Government Printing Office, Washington, D.C., 1976, Table 60; National Center for Educational Statistics. Digest of Educational Statistics, 1976 Edition (NCES 77-401). U.S. Government Printing Office, Washington, D.C., 1977, Table 64; U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 294, "School Enrollment-Social and Economic Characteristics of Students, October 1975 (Advance Report)." U.S. Government Printing Office, Washington, D.C., June 1976, Table 6; and U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 309, "School Enrollment-Social and Economic Characteristics of Students, October 1976 (Advance Report)." U.S. Government Printing Office, Washington, D.C., 1977, Table 6.

this period, from 22.0% in 1967 to 20.7% in 1976. In contrast, there is some evidence that drop out rates for whites (particularly males) tended to remain steady or perhaps to increase slightly.

Recent tabulations for persons of Spanish origin are also included in Exhibit 5-8. Although data from previous years are not available for comparative purposes, drop out rates for both males and females of Spanish origin are systematically higher than those for blacks or for whites overall. These high drop out rates are particularly apparent among the 20-24 year old group, and in 1976 the drop out rate was 40.4% for females and 38.6% for males.

The median number of school years completed is shown in Exhibit 5-9 for years between 1940 and 1976. The median number of school years completed for whites 25 and over increased from 8.7 to 12.4 years: for blacks and other races the increase was somewhat larger, from 5.7 to 11.6 years. However, the difference is more pronounced in the younger segment of that population, persons 25-29 years of age. While the median number of years for whites increased from 10.7 to 12.9 for this group, the increase for blacks and other races from 7.1 to 12.6 was larger. Thus, in 1976, the median number of school years completed by blacks and other races was only slightly less than the number completed by whites, 12.6 as compared to 12.9

Median Number of School Years Completed

	White		Black and Other Races	
Year	Over 25	25-29	Over 25	25-29
1940	8.7	10.7	5.7	7.1
1950	9.7	12.2	6.9	8.7
1960	10.8	12.3	8.2	10.8
1970	12.2	12.6	10.1	12.2
1974	12.4	12.8	11.1	12.5
1976	12.4	12.9	11.6	12.6

Source: U.S. Bureau of the Census, Statistical Abstract of the United States: 1976, (97th edition), Washington, D.C.: U.S. Government Printing Office, 1976, page 125.

EXHIBIT 5-9

Federal Programs

As mentioned in the introduction to this chapter, there have been significant educational gains both for whites and for minority groups. But the statistics are somewhat misleading, for they can convey only overall trends and do not adequately reflect the status of educationally disadvantaged persons or persons with special needs. A variety of educational programs are targeted upon specific groups of children: the handicapped, children in low-income families, children whose parents are migratory workers, the educationally disadvantaged, delinquent and neglected children in institutions, children whose primary language is other than English, and preschool populations.

The Child Development-Head Start program (13.600) of DHEW's Office of Human Development Services is designed to provide comprehensive health, educational, nutritional, social, and other services primarily to preschool economically disadvantaged children, so that they may increase their overall social competence. The program also attempts to involve parents in activities with their children. Both Summer Head Start and Full-Year Head Start programs are offered. Project grants are awarded to public or private nonprofit agencies. Eligible children are between the age of three and the age when the child enters the school system; 90% must come from families whose income is below poverty guidelines. No less than 10% of the total enrollment opportunities in each state much be made available to handicapped children. Since 1965, Head Start has served about 6,695,000 children in 50 states, Puerto Rico, the Virgin Islands, and the Pacific Trust Territories; approximately 350,000 children participated in Head Start programs during fiscal year 1976. Funds obligated for the program in 1977 amounted to $475,000,000,

compared to $432,598,000 in fiscal year 1976 and an estimated $485,000,000 in 1978.

The Handicapped Early Childhood Assistance program, or Early Education Program (13.444), of the U.S. Office of Education supports experimental preschool and early childhood programs for handicapped children through eight years of age. Public agencies and private nonprofit agencies are eligible to apply for project grants. Funding for fiscal year 1976 was $20,000,000 and is expected to remain at that level for fiscal years 1977 and 1978. In fiscal year 1976, 192 demonstration projects were supported, providing comprehensive therapeutic services for 22,000 children, compared to 150 projects serving 8,300 children in fiscal year 1977, and 214 by fiscal year 1978, providing services for 25,000 children.

The Handicapped Preschool and School Programs (Part B, Education of the Handicapped Act; 13.449) of the U. S. Office of Education provides formula grants to states to assist them in providing a free appropriate education to all handicapped children, including the mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, or those with specific learning disabilities or other health impairments who require special education. Services must also be provided for children in nonpublic schools, consistent with their number and location in the area served by the program. State education agencies in the 50 states, the District of Columbia, Puerto Rico, U. S. Territories, and the Bureau of Indian Affairs, are eligible to submit program plans; local education agencies may then apply to their state agency for funds. In fiscal year 1976, an estimated 380,000 children were served by the program; it is estimated that 406,000 and 630,000 children will be served in fiscal years 1977 and 1978, respectively. The level of funding for the program has ranged from $100,000,000 in fiscal year 1976 to an estimated $315,000,000 for fiscal year 1978.

The U. S. Office of Education assists educationally deprived children through five programs. The Educationally Deprived Children - Handicapped Program (13.427) awards formula grants to extend and improve comprehensive educational programs for handicapped children enrolled in state-operated or state-supported schools. Eligible children are those through age 20 who have not completed grade 12, whose free public education is the responsibility of the state, including the mentally retarded, deaf, speech imparied, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired. Grant size is based upon the average daily attendance of handicapped children in participating schools. In fiscal year 1976, 188,000 handicapped children participated in program sponsored educational efforts, at a funding level of $95,868,643; in fiscal year 1977, 201,000 children were served by 143 state agency programs and 2,169 local education agencies, for an estimated $111,433,452; in fiscal year 1978, it is expected that 223,832 children will be served by 137 state agencies and 3,124 local education agencies for approximately $121,311,876.

The Educationally Deprived Children - Local Educational Agencies program (13.428) awards formula grants to local school districts through state departments of education for the purpose of expanding and improving educational programs to meet the needs of educationally disadvantaged children in low-income areas, whether the children are enrolled in public or private elementary and secondary schools. Grants are intended primarily for provision of instructional activities in areas having a high concentration of children from low-income families. In fiscal years 1976 and 1977, an estimated 4,275,000 children in 13,300 school districts will be served at a cost of $1,625,357,111 and $1,721,120,372, respectively. Approximately 225,000 of these children will attend nonpublic schools. It is estimated that 5,155,000 children will be served in fiscal year 1978, at $1,919,217,542.

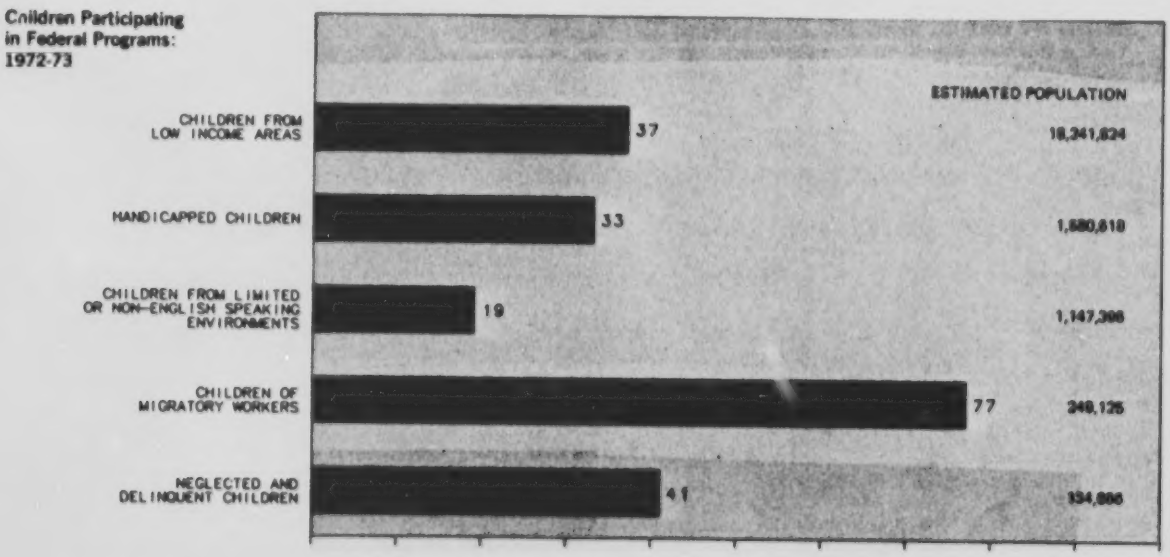
The Educationally Deprived Children - Migrants Program (13.429) awards formula grants to the states to expand and improve educational programs to meet the special needs of children of migratory agricultural workers or of migratory fishermen. Funds are allotted to the state educational agencies, which then allocate them to the local eligible school districts for the purpose of identifying and meeting special needs of migrant children through remedial instruction; health, nutrition, and psychological services; cultural development; and prevocational training and counseling. In fiscal year 1976, services will be provided for approximately 530,000 children in 47 states, Puerto Rico, and the outlying areas at a cost of $97,090,478 or about $183 per child. In fiscal year 1977, the program will serve about 675,000 children at $130,909,812. In fiscal year 1978, it is estimated that 400,000 children will be served at an average cost of $536 per child, or an estimated $145,759,940.

The Educationally Deprived Children - State Administration program (13.430) is designed to improve and expand educational programs for disadvantaged children through formula grant assistance to state education agencies and through improvement of their assistance capabilities to local education agencies. Types of administrative assistance provided through the program include project development and review, approval of projects, dissemination, and evaluation and preparation of reports. In fiscal year 1976, 50 states, the District of Columbia, and outlying areas were funded; the same degree of participation is expected for fiscal years 1977 and 1978.

The Educationally Deprived Children in State Administered Institutions Serving Neglected or Delinquent Children program (13.431) is designed to provide these same expanded and improved educational programs and services to institutionalized children for whom the state has an educational responsibility. Formula grants are awarded to state agencies which are directly responsible for providing

free public education for those under age 21 who are not beyond grade 12 who are in state institutions for neglected or delinquent children or in adult correctional institutions. Funding is determined by the average daily attendance in school of children residing in the institution. In fiscal year 1976, 50,000 children in approximately 1,500 state operated or supported institutions were served by the program, at an average cost of $549 per child, or $27,324,678. Approximately the same number of children will be served in fiscal years 1977 and 1978, at an average cost of $560 and $590 per child, respectively. Total obligations are expected to amount to $28,841,151 in fiscal year 1977 and $29,415,469 in 1978.

The Bureau of the Census has summarized the delivery of services to children with special educational needs as shown in Exhibit 5-10. The highest



Source: U.S. Bureau of the Census, Status: A Monthly Chartbook of Social and Economic Trends, Washington, D.C.: U.S. Government Printing Office, October 1976, page 31.

EXHIBIT 5-10

rate of program participation was for children of migratory workers; of the 249,125 children involved, 77% were served. The largest number of children served were from low income areas although the participation rate, 37%, was rather low. The lowest participation rate, 19%, was for the 1,147,396 children from limited or non-English speaking environments. Thus, these data suggest that despite the substantial gains which have been made, the educational needs of some groups of children are not being met by existing programs.

PART C

UTILIZATION

OF

INFORMATION ABOUT CHILDREN

CHAPTER 6

CASE STUDIES: THE USE OF INFORMATION FOR DECISION MAKING

Research programs, surveys, and other studies can be very expensive, and the generation and collection of information is sometimes criticized for that reason. Some critics question whether information is worth its cost, and argue that information does not influence decisions and therefore can have little if any positive impact on children to justify its costs. Unfortunately, assessing the impact of information poses some extremely difficult methodological problems, and there are relatively few studies which have evaluated the impact of information.

While information about children certainly could be used more efficiently and effectively, as will be discussed in Chapter 7, there is ample anecdotal evidence of its use; the purpose of this chapter is to describe three case studies involving three different types of decision problems. Before doing so, however, it is useful briefly to review some of the past reports which have examined the utilization of information.

Caplan, Morrison, and Stambaugh (1975) reported findings on the utilization of "social sciences information." Their study was addressed to high-level decision makers in DHEW and other departments, and involved a "critical events" approach. In querying participants, they asked for recall of specific instances (i.e., critical events) in which information was utilized. They reported finding between 450 and 500 nonduplicative instances in which social science information was utilized. These data suggest that information is not ignored; it may even be welcomed under the right circumstances.

Analyzed differently, however, the results of the Caplan et al. study, like those of other studies, could be interpreted less positively. First, there is no way of telling whether 450 - 500 incidents is high or low without knowing what the total "universe" of decisions was -- a fact the authors themselves acknowledge. Indeed, they conclude that what can be inferred about amount of use "is less important than the data which these instances give about the characteristics of the knowledge itself [which was used]." They then analyze the data on different policy areas, according to source and sponsorship of the knowledge or information, and how it was acquired, or learned of, by the respondent. Although Caplan et al. do not discuss the issue further, one could argue that 450 - 500 incidents of utilization--amounting to somewhere between 2 and 3 incidents per respondent--is actually rather small. Other analyses of their data indicate that part of the reason for any underutilization is that the research and policy-making "communities" are set apart. They suggest a "two community" hypothesis about nonutilization

> ...similar to that which C.P. Snow makes in The Two Cultures to explain the gap between the humanities and the hard sciences. People who hold this [two community] position argue that social scientists and policy makers live and operate in separate worlds with different and often conflicting values, different reward systems, and different languages. The social scientist is concerned with "pure" science and esoteric issues. By contrast, government policy makers are action oriented, practical persons concerned with obvious and immediate issues (p. x).

Supporting the two-community hypothesis were survey findings indicating a lack of mutual trust and understanding between social scientists and policy-makers. Caplan et al. cite a number of characteristics of the information itself which lead to nonutilization; these findings are important because they shed light on factors about information affecting its effectiveness.

Other studies have also attempted to ascertain which factors determine the effectiveness of information. For example, Brickell, Aslanian, and Spak (1974) queried several users of information to identify what types of information are most useful for purposes of decision making. Overall, they concluded, data about program goal and impact appraisal were judged to be the two most useful types of information. Similarly, in various reports the General Accounting Office (GAO) has discussed factors related to the effectiveness of information. For example, the GAO (1974) report on Law Enforcement Assistance Administration evaluations stressed comparative information about program evaluations. Topics pertaining to effectiveness of information utilization were also discussed in a GAO (1976) report focusing on DHEW, which investigated how data could be used for assessing the well-being of children, and how such assessments could be used for evaluating programs and targeting programmatic resources. While information resources at the federal level are lacking, several states have compiled extensive statistics on the status of children, and some have done so on a county-by-county basis. Such statistical information is used for purposes of needs assessment and program planning, for example.

However, GAO and other reports also specifically cite the importance of utilizing research information in addition to statistical indicators. A Herner and Company (1977) report on the utilization of information by states indicated that "packaging" was a major factor limiting use of research information. That is, research information is often not analyzed and described in such a way that it is readily usable by planners, who may not have the time or staff to acquire and analyze it. Thus, information utilization is often restricted to the kinds of information most readily available--which is usually statistics about demography rather than research

information. Moreover, there seems to be relatively little synthesizing or melding together of research and statistical information; one or the other is typically ignored, despite the fact that both may be germane to the same decision problem.

As mentioned, three case studies are examined in this chapter. The first involves the use of county-level statistics to develop the index of medical underservedness, which is used to target medical resources provided through Health Maintenance Organizations. The second example involves the analysis and "packaging" of research information, in order to facilitate its use by planners and other decision makers. The example is adapted from materials Herner and Company prepared for a workshop on the utilization of information for planning. It focuses upon research implications and the nexus of three salient issues: day care, child abuse and neglect, and adolescent pregnancy. The third example is perhaps the most interesting, both because it involves current DHEW policy and program decisions and because it illustrates how both research and statistical information can be utilized in decision making.

Development of the Index of Medical Underservedness

There are of course many different factors which determine the health status of a given population and govern their needs for medical services. Many of these are difficult to define and yet more difficult to measure in an "objective" manner. The subjective nature of judgments about health service needs notwithstanding, planners and policy makers at national, state, and local levels must make decisions about the allocation and targeting of medical resources. An essential consideration is the extent to which planners and policy makers, when faced with such decisions, can benefit from

the systematic utilization of statistical information. More specifically, can "indicators" of need be used to help assess priorities for medical resources?

One obvious and important factor in determining the need for medical resources is the degree to which the population is being adequately served, irrespective of its demand. Medical underservedness is particularly poignant for children, given the well-documented relationships between such factors as prenatal care and developmental disabilities and other negative consequences. The degree of medical underservedness is a critical factor in deciding where and how resources ought to be allocated or targeted. Of course, medical underservedness is a difficult concept to assess, and, in describing how an "index of medical underservedness" (IMU) was developed for the purpose of selecting sites for Health Maintenance Organization (HMOs), only an overview of the approach can be presented.*

The Health Maintenance Organization Act (P.L. 93-222), passed in 1973, included provisions that areas or populations designated as "medically underserved" would be given priority in funding. By definition, a medically underserved population is a population living in an area designated by DHEW as having a shortage of personal health services. Responsibility for designating those areas was assigned to the Bureau of Community Health Services (BCHS), which in turn contracted with the Health Services Research Group for assistance in developing an index of medical underservedness.

Perhaps the first major technical problem this group encountered was the lack of consensus about the definition of medical underservice. For various reasons, this precluded many analytic or simulation approaches. One

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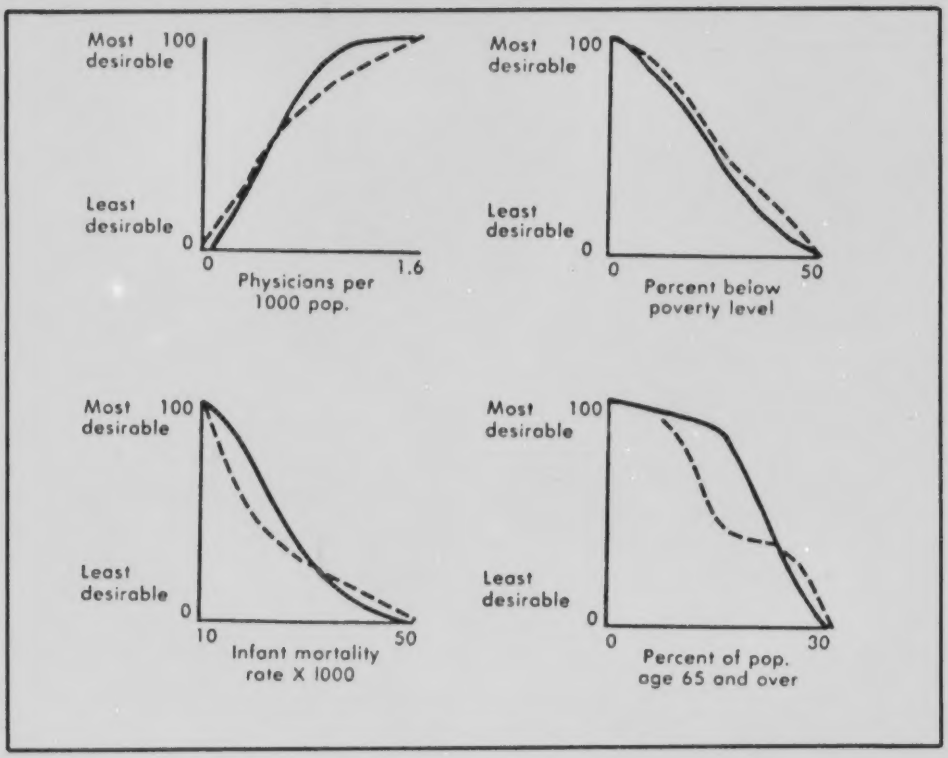
*The description below was adapted from a larger manuscript prepared by the Health Services Research Group, of the University of Wisconsin-Madison. The full text will appear in Snapper (1978).

approach might have been to rely upon a site visit team whose judgments would serve to define medical underservedness; that approach was precluded for practical reasons of time and cost, since BCHS was interested in assessments for about 8,000 sites. A more promising approach was to develop an index of medical underservedness to serve as a "proxy" for judgments that would otherwise have to be rendered on a site visit. Such an index would incorporate data from each site indicative of medical underservedness.

Seemingly, the lack of consensus about definitions would frustrate the development of such an index. However, it was noted that despite disagreement about definitions, there was convergence in opinion about which areas ought to be designated as medically underserved. Thus, participating medical service experts generally agreed about which areas were underserved; and, further, the degree of convergence in opinion was sufficient to permit development of the index using data for counties and selected sites throughout the country.

Several different quantitative techniques were investigated, each of which did a good job of approximating or predicting the experts' judgments and ratings. Of eight models developed and tested, a four-variable "multi-attribute utility" (MAU) model was recommended and ultimately adopted. DHEW officially announced plans to use the index in implementing the HMO program in the Federal Register of September 2, 1975.

The index itself can be described in relation to Exhibit 6-1, in which the abscissas denote the four variables comprising the index. The two curves for each variable show the ratings of two different groups of experts, and illustrate good convergence and agreement in opinion about the level or degree of underservice associated with each of the four variables. Of particular interest is the variable "infant mortality," which is commonly regarded as



Source: Health Systems Research Group

EXHIBIT 6-1

a valid measure of health status or health risk in children. However, infant mortality is interpreted somewhat differently for the index of medical underservice and is apparently used as an indicator of unmet need, i.e., medical underservedness. "Percent below the poverty level" is, in contrast, not regarded as a direct measure of health status or risk although it certainly is related indirectly as an indicator of health services needs. But, for the purposes of the IMU index, poverty may be regarded as indicating an inability to compete for and obtain "outside" services. Like infant mortality, it would therefore indicate needed but unobtained services, i.e., medical underservice.

The aggregate index score was found by weighting each of the scores from Exhibit 6-1, based upon the experts' ratings of "their usefulness as indicators of health services scarcity." The authors note that an index based on convergence of expert opinion provides an adequate approach for the short run, given the pragmatic constraints posed by time. But they raise the question about longer-run issues concerning questions of policy. For example, given more time, information derived from research could have been used "convergently" to augment expert opinion, to provide a basis for sharpening opinions about how such indices ought to be developed and to help verify which measures are indeed relevant and valid.

Convergent Use of Research Information

One of the most important issues in needs assessment, planning, and other decision-making components of human services delivery is convergence. Rarely is information from any one source conclusive and wholly responsible for a given decision; most often information "converges" from several partially reliable sources. Convergence is often used to verify or establish validity, since agreement among multiple informational inputs or sources tends to establish the meaningfulness and validity of each. For example, factor analysis is a quantitative technique used to test for the "convergence" of statistical measures and to confirm the meaningfulness of a factor.

In describing the use of research information for planning, it is important to recognize that convergence is also used--although it may not be explicitly recognized or identified as such. For example, the confirmation of expert opinion through use of supportive research findings is a convergent technique. And many literature reviews are essentially attempts to discern convergence among findings from several studies which, when taken individually, are fallible.

Although there are no quantitative models akin to factor analysis for ascertaining convergence in research information, findings from several different studies may nevertheless be relevant to different aspects of a decision and be used convergently. In the absence of quantitative models, this approach is best explained through example. More specifically, the example below illustrates the convergent use of research information in planning.

One of the first steps in using research (or other) information in planning is to analyze and structure the decision problem. An example chosen for a workshop on planning is described below, and its essential structure is illustrated in Exhibit 6-2. At the top of Exhibit 6-2 is the "problem," which is the category of need or service being addressed. The "hypothesized indicator" is a construct which is thought to be relevant to the problem, but which cannot be measured or assessed directly. The "correlate," on the other hand, is assumed or known to be correlated with, or a measure of, the hypothesized indicator.

How does one verify that the hypothesized indicator and its correlates are indeed relevant measures or indicators? One approach is to identify research findings involving "conjoint indicators" which, as we use the term, are indicators known to be related to the problem, its hypothesized indicators, and their correlates. Thus, conjoint indicators serve to "tie together" the different elements at the "top" of the model and tend to verify their interrelations.

Up to this point the conceptualization of the model has been considered without much regard to how, as a practical matter, direct measures or assessments might be made. In the example being considered, there are several "factors" which are relevant as measures of a conjoint indicator. In turn, there are several plausible measures of each of these factors.

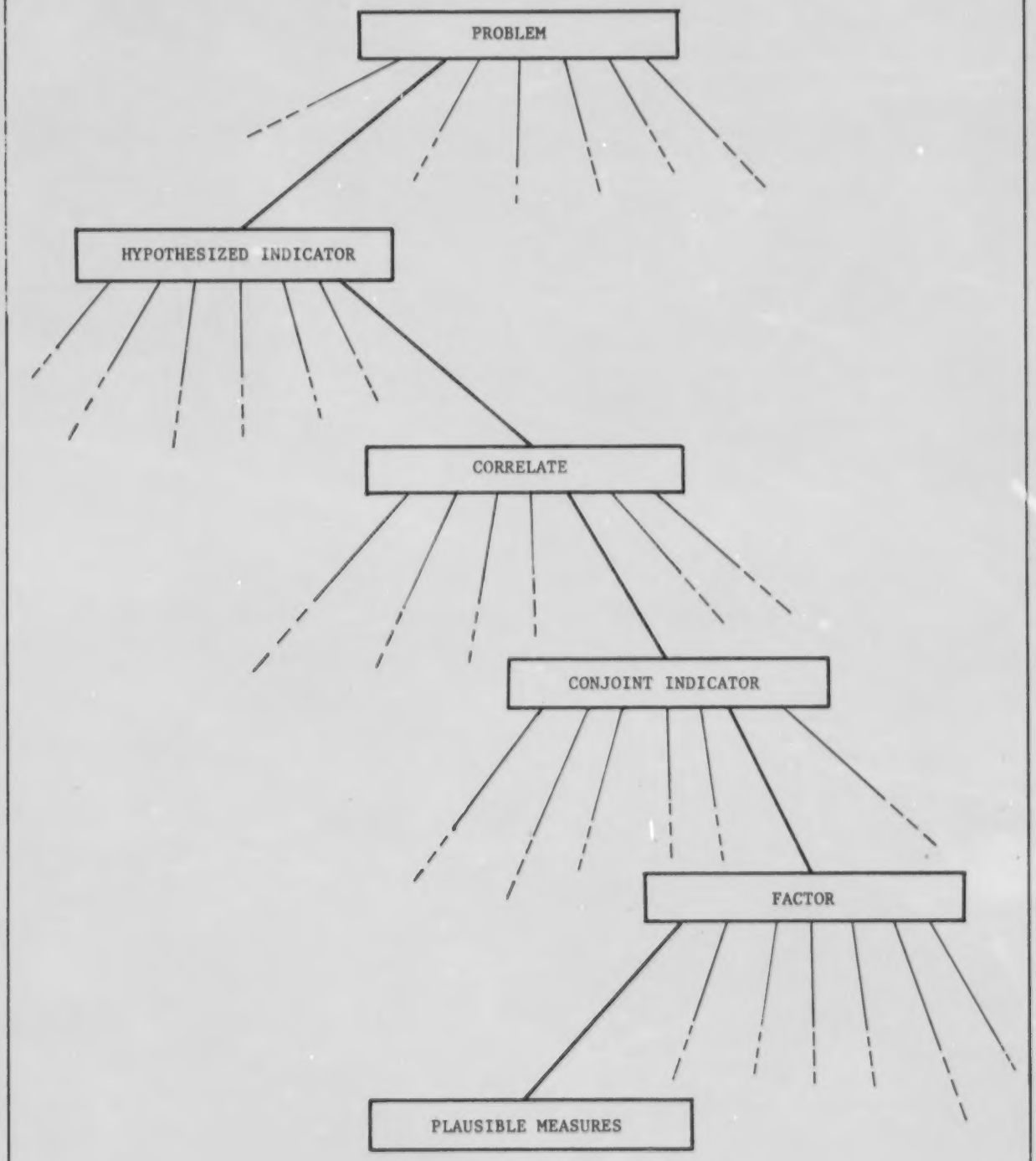

PROBLEM
HYPOTHESIZED INDICATOR
CORRELATE
CONJOINT INDICATOR
FACTOR
PLAUSIBLE MEASURES

EXHIBIT 6-2

Child abuse and neglect (CAN) was the problem chosen for discussion at the previously mentioned workshop, because of its potential interrelation with other important problems. Exhibit 6-3 shows how the model in Exhibit 6-2 can be applied specifically to CAN and used to help identify programs or intervention strategies that might prove effective in addressing this problem. One hypothesized indicator of CAN is parental youth or immaturity, which was cited as a potential indicator in a report by Nagi (1976). Adolescent pregnancy is presumed to be a correlate because adolescent parents are relatively likely to exhibit the characteristics of "youth" and "immaturity."* Of course, youthfulness in and of itself is not "causative" in any meaningful sense; but research can help ferret out the mechanisms which may underlie any increased risk among the adolescent population. An important indicator of the risk of abuse and neglect is the mother's expectations of the child; many parents expect too much from their children or are impatient with them for any of a variety of reasons, and "take it out" on the children. Much of that problem stems directly from a lack of knowledge or understanding by parents, especially new, youthful parents, of the developmental process in children; indeed, that deficiency has provided the rationale for Education for Parenthood programs (EFP) targeted on adolescent groups.

While there is little direct evidence of this relationship, there is much indirect evidence (see the bibliography at the end of this chapter) addressing the component linkages illustrated in Exhibit 6-3. As one example,

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*We certainly do not intend to imply that adolescent parents are the only at-risk group or that older groups do not exhibit immaturity in behavior towards their children. Nor do we wish to imply that age is the only consideration; for example, Baizerman et al. (1971) conclude from their review that race, socio-economic status, parity, and pre-pregnant obesity are important--and perhaps more important--than age per se. A fuller analysis would make explicit other indicators and correlates. We chose adolescent pregnancy because it is particularly salient from a programmatic perspective, as will be discussed shortly.

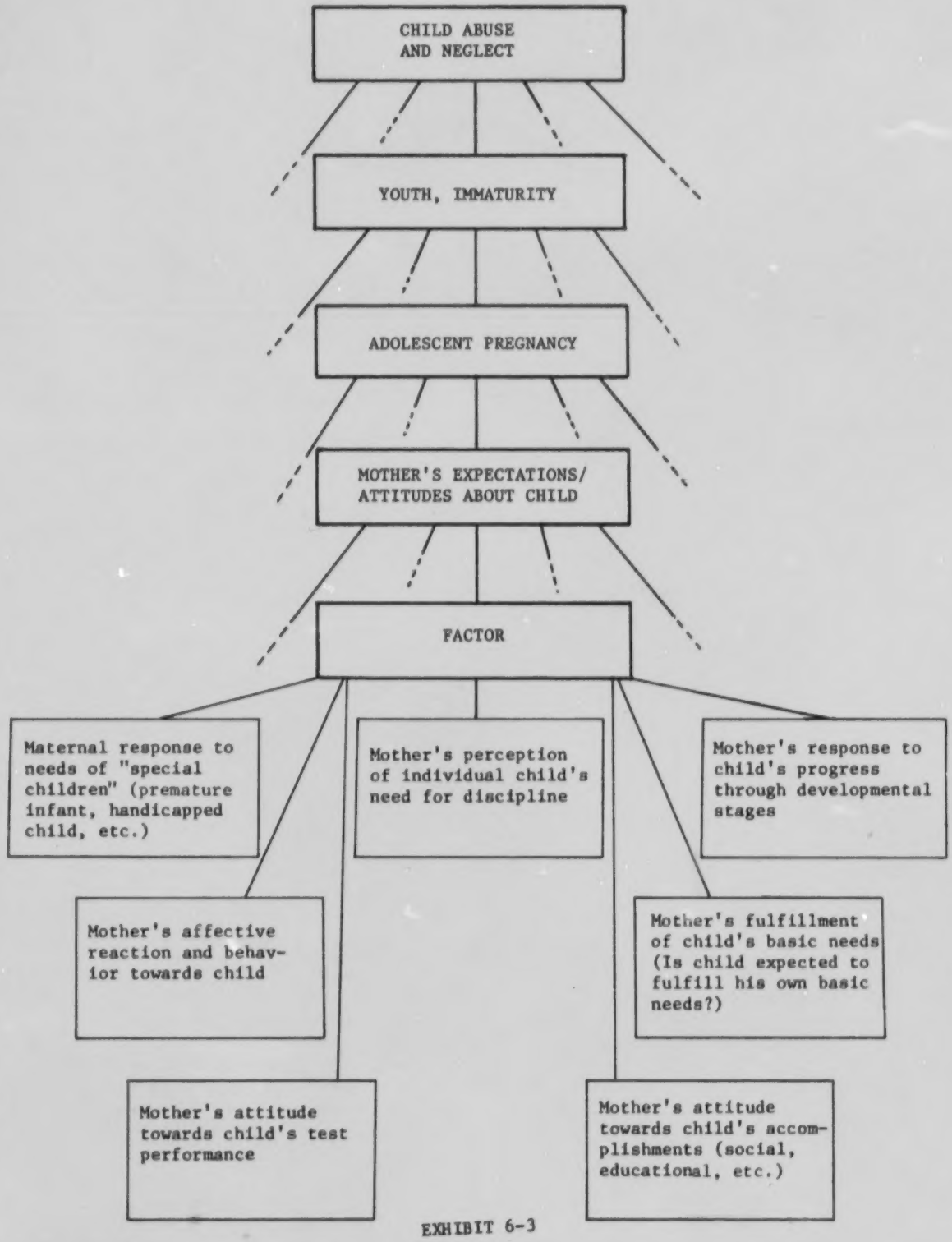
CHILD ABUSE AND NEGLECT
YOUTH, IMMATURITY
ADOLESCENT PREGNANCY
MOTHER'S EXPECTATIONS/ ATTITUDES ABOUT CHILD
FACTOR
Maternal response to needs of "special children" (premature infant, handicapped child, etc.)
Mother's perception of individual child's need for discipline
Mother's response to child's progress through developmental stages
Mother's affective reaction and behavior towards child
Mother's fulfillment of child's basic needs (Is child expected to fulfill his own basic needs?)
Mother's attitude towards child's test performance
Mother's attitude towards child's accomplishments (social, educational, etc.)

EXHIBIT 6-3

Friedrich and Boriskin (1976) review the literature on "the role of the child in abuse, with special attention to identification of particular types of children who may be most at risk." They cite several references relating prematurity, mental retardation, and physical handicaps to abuse. They do not, however, articulate the relationship between these child characteristics and characteristics of the parents, such as age. However, Hunt (1976), in his review, cites several studies in which prematurity is specifically identified a consequence of adolescent pregnancy. Also, in a 1976 publication, the Alan Guttmacher Institute cites 2.4 times the rate of neurological abnormalities among births to mothers 15 and under compared to the rate for mothers in their early 20s, based upon findings reported in The Women and Their Pregnancies (1972). (See the annotated bibliography at the end of this chapter for selected references addressing one or more of the linkages or relationships shown in Exhibit 6-3.) As a practical matter, however, there remains the question of how best to develop operational measures for purposes of planning, assessing needs, or identifying the groups or individuals at greatest risk. This is a measurement problem not addressed in the research literature.

To illustrate how some practicable measures could be developed, instruments used for The Women and Their Pregnancies were examined to identify items which were plausible as measures or indicators of the mother's expectations concerning the child. Selected items, or variants of them, are shown grouped as comprising a single factor. In an earlier paper, Snapper, O'Connor, and Einhorn (1974) suggested that multiple measures should be used, including confirmatory factor analysis to help ascertain which measures were in fact relevant and valid. A set or "cluster" of measures, such as those indicated in the lower portion of Exhibit 6-3, would constitute a single factor. Of course, other factors could also be

developed and used; for example, another factor would of course be the father's expectations.

While we could have expanded the example further to explore these measurement issues more fully, the primary purpose was to highlight the implications of analyses of research for programmatic decision making. An obvious and direct intervention strategy would be to enroll adolescents in Education for Parenthood programs, in order to instill realistic expectations and attitudes in parents-to-be. That strategy would of course serve for primary prevention of child abuse and neglect, insofar as it results from the mother's or the father's expectations and attitudes regarding the child (see Exhibit 6-4).

However, the research suggests some innovative options which could provide some significant ancillary benefits.* For example, the research shows rather conclusively that the first year is critical for the mother, and that if she drops out of school for long she is relatively unlikely to complete her education. Other studies indicate, not surprisingly, that the need for child care services is high among adolescents and that such services are often indispensible in the mother's return to school. A plausible option is to provide day care services through the school, but, further, to make the day care facility an integral component of the school's Education for Parenthood (EFP) program.

As noted by Raspberry (1976) in the Washington Post:

> A more hopeful direction may be the trend already established in some high schools where childbearing classes are a regular part of the curriculum, often with the students' own children in the nurseries. In addition to teaching these young parents and potential parents important lessons in parental responsibility and in the

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*We are indebted to Professor Lorraine Klerman, who suggested as possibilities certain of the strategies considered herein.

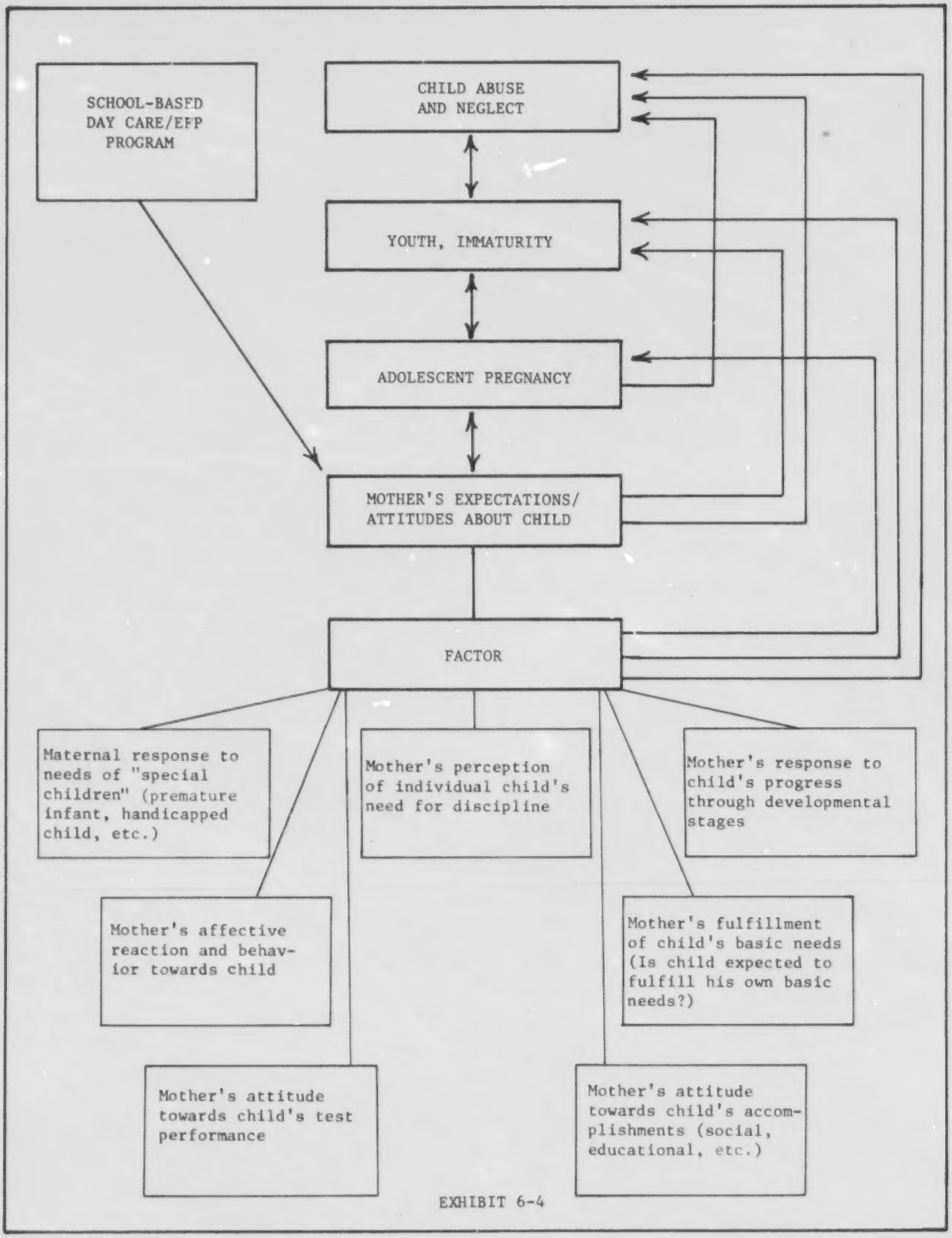

SCHOOL-BASED DAY CARE/EFP PROGRAM
CHILD ABUSE AND NEGLECT
YOUTH, IMMATURITY
ADOLESCENT PREGNANCY
MOTHER'S EXPECTATIONS/ ATTITUDES ABOUT CHILD
FACTOR
Maternal response to needs of "special children" (premature infant, handicapped child, etc.)
Mother's perception of individual child's need for discipline
Mother's response to child's progress through developmental stages
Mother's affective reaction and behavior towards child
Mother's fulfillment of child's basic needs (Is child expected to fulfill his own basic needs?)
Mother's attitude towards child's test performance
Mother's attitude towards child's accomplishments (social, educational, etc.)

EXHIBIT 6-4

> necessity for enhancing their children's physical, emotional and intellectual growth, they also can help to drive home the fact that parenting is hard work, not an escape from anything.
>
> Emily Moore, director of Planned Parenthood of Metropolitan Washington, believes that giving young people a sense of the reality of childbearing is as important as birth-control techniques in giving them the basis for an intelligent choice between having children or not having children.

Such a program might tend to minimize the incidence of repeat pregnancies by enabling the mother to continue her education, and ultimately help her and her family escape the acute poverty that traps many families formed through adolescent pregnancy. Clearly such a program could more than pay for itself financially in the long run, in addition to improving the status of many children at-risk. Of course, one or more elements of this day care/EFP strategy are embodied in any number of programs already existing, and some programs have innovations not discussed above. A selection among programmatic options could be based upon the implications of the analysis of research findings discussed above.

Adolescent Pregnancy: Program and Policy Options

In the preceding example, adolescent pregnancy was examined in relation to one of its possible consequences (child abuse and neglect), and in relation to one programmatic option (day care programs). We also examined some of the implications of research findings for planning decisions. Of course, that example explored just a few of the issues and options involved in a very complex, serious national problem. It is useful, therefore, to examine current DHEW deliberations about adolescent pregnancy, highlighting the basic policy and program options being considered, to ascertain how both research and statistical information were used convergently in those deliberations.

For purposes of clarity, it is useful to structure the Department's deliberations using a decision-analytic model. These deliberations were interagency in nature, involved the solicited input from numerous experts and practitioners from outside as well as within the government, and provided a wealth of information on all aspects of adolescent pregnancy. While the Department did not formally use a decision-analytic model, the procedures followed were so exhaustive and carefully recorded as to support this type of analysis after the fact. For the purposes of this chapter, we can consider only an overview, however. Three basic sets of options can be identified using this type of analysis: options about basic approach or policy options, funding options, and program options.

Policy Choices

Choices about the basic approach or policy involved three issues. First, what should the relative emphasis be on prevention of adolescent pregnancy versus assistance to those already pregnant? Should one be emphasized over the other? Or, should both be equally emphasized? Second, should the target population be the at-risk population of pregnant adolescents, or should appropriate services be targeted on all adolescents? Third, should new legislative and programmatic initiatives be developed, or should existing programs be modified? None of these options are mutually exclusive, of course, and in fact a number of mixes were considered. The basic options, along with the most salient mixes, are represented in Exhibit 6-5.

The first "choice node" pertains to the emphasis on prevention versus provision of services to those already pregnant. Perhaps the most salient factor in this decision, heavily borne out by research, is that even intensive services cannot entirely overcome certain consequences (physical,

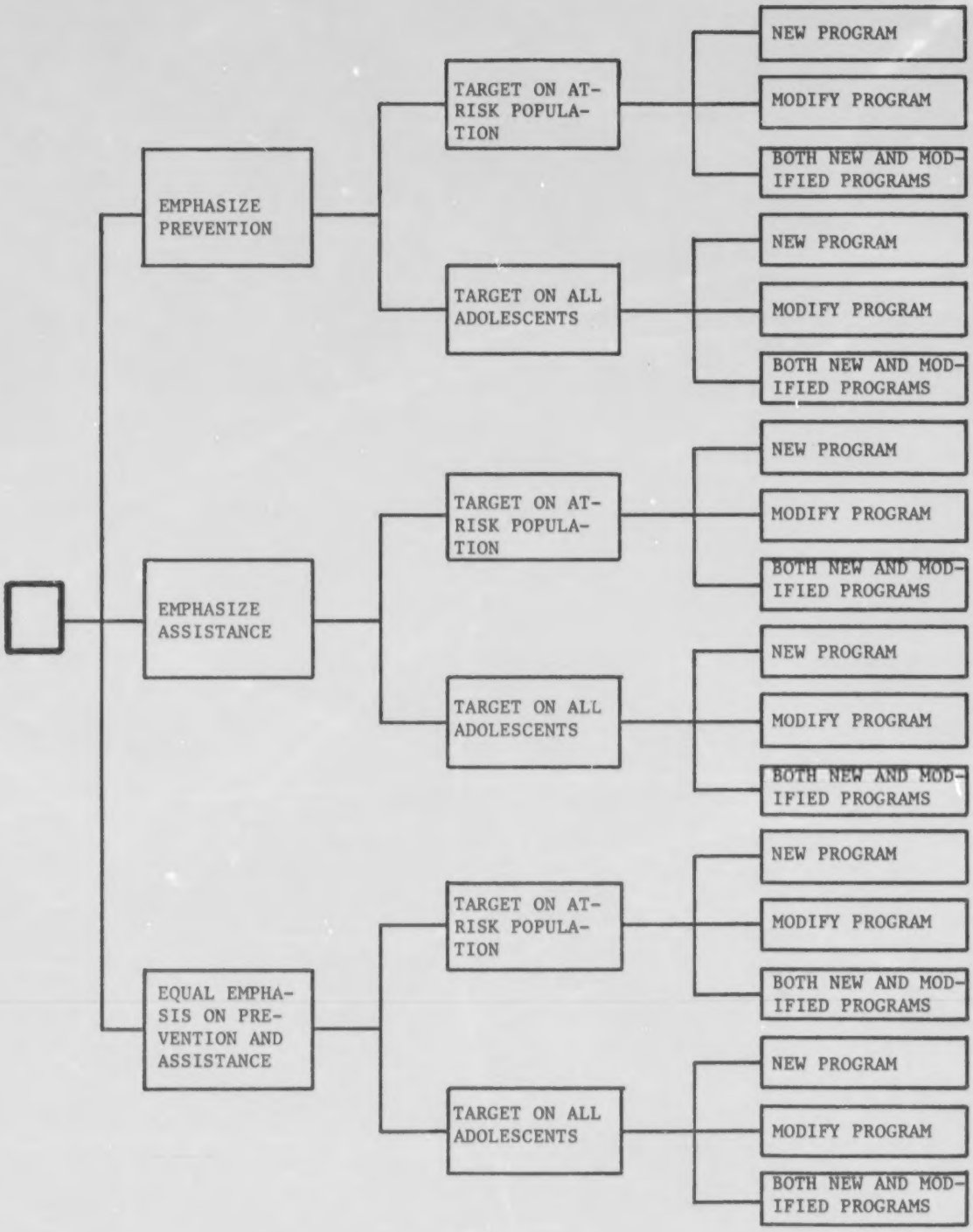

EMPHASIZE PREVENTION
EMPHASIZE ASSISTANCE
EQUAL EMPHASIS ON PREVENTION AND ASSISTANCE
TARGET ON AT-RISK POPULATION
TARGET ON ALL ADOLESCENTS
NEW PROGRAM
MODIFY PROGRAM
BOTH NEW AND MODIFIED PROGRAMS

EXHIBIT 6-5

emotional, and social) of adolescent pregnancy. Not even abortion eliminates all these risks and may itself induce certain negative consequences such as guilt. Specifically cited as an intensive provider of services to pregnant adolescents was the program at the Johns Hopkins Center which, although expensive, could not reduce risk to levels experienced by older mothers.

In contrast, family planning programs are effective in reducing fertility rates. Specifically cited, in addition, was the fact that such services are utilized by adolescents and that the availability of contraceptives apparently does not increase sexual activity.

Arguments for emphasizing services for assisting the parents--both mother and father--stem in part from the wide variety of needs they have, and the severe consequences which can accrue to the parents and the child if these needs are not met. Appropriate prenatal care is demonstrably effective in reducing risks. But, in addition, needs for services such as counseling, nutrition programs, vocational programs, advocacy, and day care were cited. For example, it was explicitly noted that only one-third of all school districts provide programs to assist the mother in remaining in school.

The second choice node pertains to the target population and whether all adolescents ought to be included or only the at-risk population. It was noted that adolescent pregnancy often stems from a variety of situations to which all adolescents may be exposed. Adolescent pregnancy - as well as other problems - may stem from alienation from school or family, lack of opportunities for work or recreation, or other causes. Programs focusing only on adolescent pregnancy could, therefore, be criticized for attacking the symptom rather than the cause and for artificially focusing on the sexual aspects of the well-being of adolescents. Programs targeted on all youth would clearly be expensive; but the efficiency of prevention programs

implies that at least in the short run there could be some dramatic impacts on adolescent pregnancy and its negative consequences, and that such programs would be cost-effective.

The third choice node concerned whether new programmatic initiatives were necessary or whether existing programs could be appropriately modified. Several relevant considerations emerged. It was noted that there was considerable room for improving existing programs; for example, coordination could be improved at the federal level and at the local level, in part through joint funding of multipurpose service providers. Factors favoring a new program include arguments that new programs would make available funds for services not covered by existing programs, and that new programs would not draw away from existing programmatic funds.

Two basic alternatives for new programs were considered, each with pros and cons specific to it. One alternative was to provide comprehensive programs for pregnant adolescents, as well as for adolescent parents and their infants. This alternative is similar to one in legislation introduced in the last term (Kennedy/Bayh). The second alternative was funds for Youth and Family Services and Support, which would encompass adolescent pregnancy but would explicitly address other aspects of adolescence as well.

Cost Options

Of course these policy options and mixes of them can be costed out at any level over an extremely wide range. For each possibility it is useful to follow DHEW's designation of fundings levels as "high-cost," "middle-cost," and "low-cost"; it is also useful to restrict the dollar values considered to the range actually considered and ultimately embodied in specific program "packages," namely $50 to about $250 million. Roughly, we can consider as "low-cost" $50-$75 million, "middle-cost" as $100-$170 million, and "high-cost"

as approximately $250 million.

Exhibit 6-6 indicates the basic structure of the decision, including the options along with the policy choices previously discussed. There could be a low-, middle-, and high-cost program considered for each of the possible policy choices, yielding 54 basic possibilities for specifying specific program options, and providing a basis for categorizing the program options which were in fact articulated.

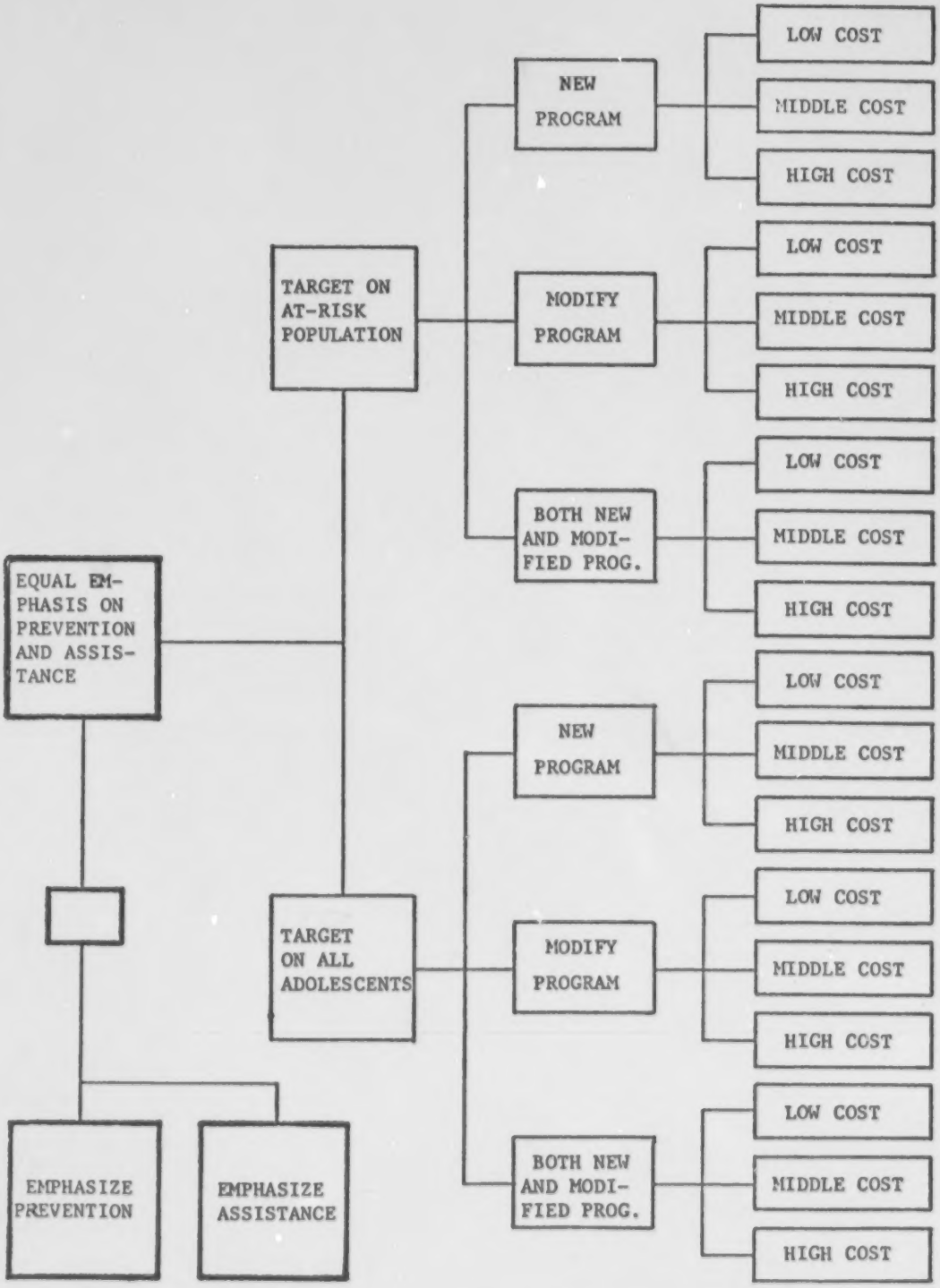
Program Options

Of course, numerous alternatives could be proposed for each of the 54 possibilities for specifying programs. The workgroup identified and defined 11 specific possibilities, which are described in Exhibit 6-7. These programmatic options vary widely according to the aforementioned basic policy choices and the cost levels. Exhibit 6-8 shows how these 11 specific program options map into Exhibit 6-6 and the 54 possibilities. Clearly, any choice among these 11 program options implies some important tradeoffs among the various policy and cost options, in addition to the relative merits of the programs themselves.

Departmental Recommendations

While it is clear that there are other options which might have been considered, the recommendations to Secretary Califano were concerned with the 11 described above. The recommendations about specific programmatic options are predicated on the preceding policy choices, and it is interesting and important to outline them in advance of the implementation of any particular programmatic initiative.

Regarding preventive programs versus those that provide assistance


EQUAL EMPHASIS ON PREVENTION AND ASSISTANCE
EMPHASIZE PREVENTION
EMPHASIZE ASSISTANCE
TARGET ON AT-RISK POPULATION
TARGET ON ALL ADOLESCENTS
NEW PROGRAM
MODIFY PROGRAM
BOTH NEW AND MODIFIED PROG.
NEW PROGRAM
MODIFY PROGRAM
BOTH NEW AND MODIFIED PROG.
LOW COST
MIDDLE COST
HIGH COST
LOW COST
MIDDLE COST
HIGH COST
LOW COST
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HIGH COST
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HIGH COST

EXHIBIT 6-6

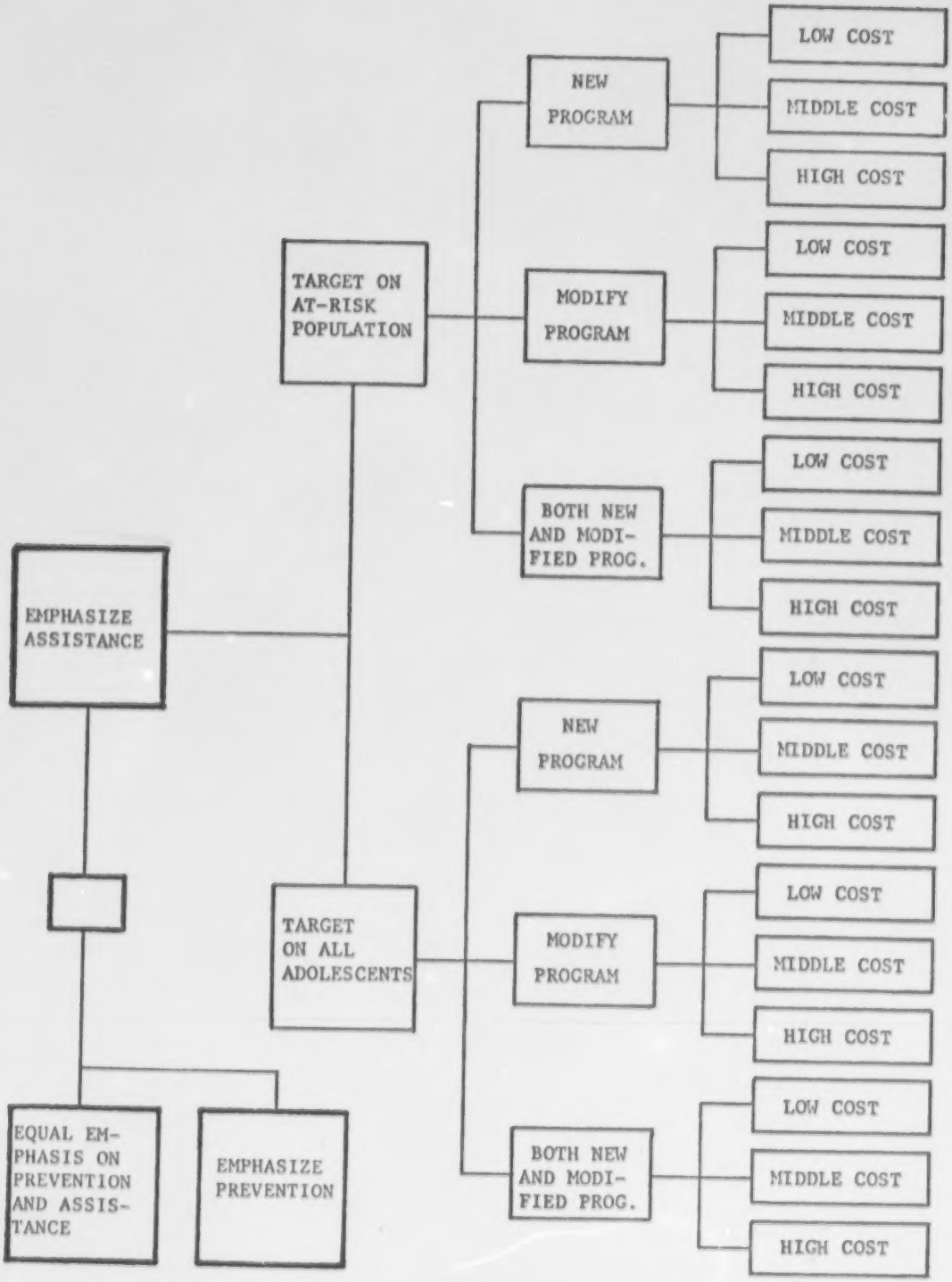

EXHIBIT 6-6 (continued)

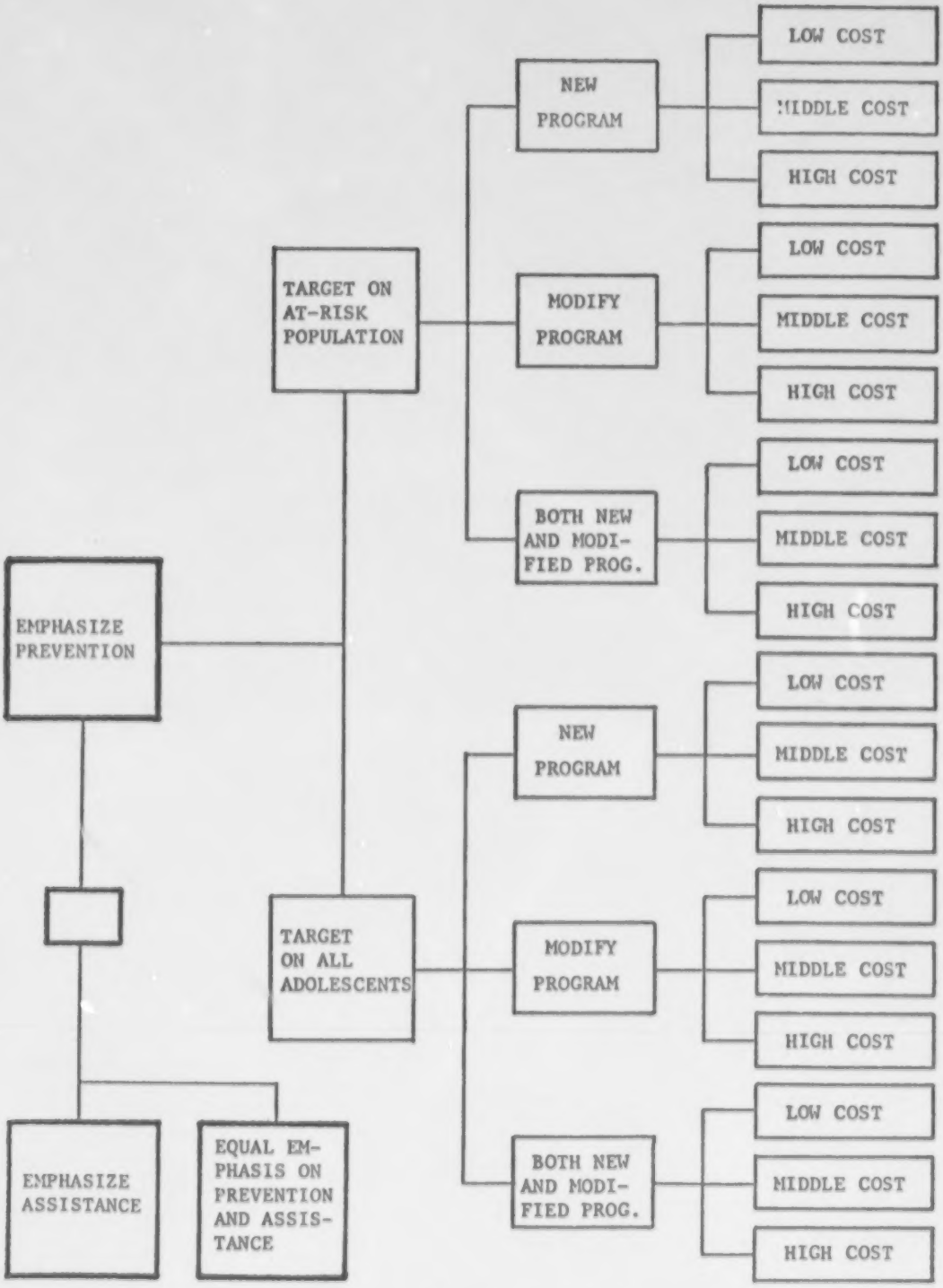

EXHIBIT 6-6 (continued)

OPTION 1

o Improvements to, and expansion of, contraceptive services to adolescents through Title X (Family Planning)	$21
o A significant expansion of education on health, sex, family life and parenthood through communities and schools	6
o Expanded services to adolescents through community health centers	15
o Innovative counseling services through CMHCs	2
o Improved research in reproduction, fertility control and sexual activity, and training for servece providers	6
TOTAL	$50 Million

OPTION 2

OPTION 1 PLUS:	$50
o Expanded entitlement of adolescents to title XX services (counseling, contraceptive services, preventive services, etc.)	75
o Modifications in Medicaid to increase reimbursement for contraceptive services	26
o Additional counseling and referral services through schools (Guidance and Counseling)	3
TOTAL	$154 Million

OPTION 3

OPTION 1 PLUS:	$50
A new legislative authority which would provide funds for Yough and Family Services	75
TOTAL	$125 Million

EXHIBIT 6-7

OPTION 4

o Modifications in Medicaid to permit coverage of an additional 30,000 low-income, pregnant adolescents	$30
o Expansion of MCH title V M&I projects to serve an additional 25,000 adolescents	20
o Support for start-up of educational programs designed to keep pregnant adolescents and adolescent parents in school	12
o Enforcement of title IX	1
o Expanded education for parenthood	0.5
o Expanded research in maternal, fetal and child health; and training for services providers	6
TOTAL	$69.5 MILLION

OPTION 5

o A new legislative authority to assist comprehensive programs for pregnant adolescents and adolescent parents (similar to the Kennedy/Bayh bill)	$50 Million

OPTION 6

OPTION 4 PLUS	$69.5
o Expanded infant and day care for 50,000 additional children of low-income adolescents through title XX	75
o Targeted Consumer and Homemaker Education	10
o AFDC coverage for the unborn child	8
TOTAL	$162.5 Million

OPTION 7

OPTION 5 PLUS	$50
Additional funds for the OPTION 5 program	$50-$75
TOTAL	$100-125 MILLION

EXHIBIT 6-7 (continued)

OPTION 8

both OPTION 4 and OPTION 7 — TOTAL $169.5

OPTION 9

o Expanded and improved contraceptive services through title X	$21
o Expanded community education efforts	6
o Expansion of title V M&I targeted to adolescents	20
o Expansion of Medicaid eligibility to low-income pregnant women	30
o AFDC coverage for the unborn	8
o Educational programs to keep pregnant adolescnets and adolescent parents in school	12
o Enforcement of title IX	1
o Research and training	6
o Expanded services through community health centers	15
o Modifications in Medicaid to increase reimbursement for contraceptive services	26
TOTAL	$147 Million

OPTION 10

OPTION 9 PLUS — $147

o Require States to pay for contraceptive services for Medicaid eligibles through Medicaid rather than title XX	15
o Expanded infant and day care through title XX	75
o Additional Counseling and referral services	5
o Additional biomedical, behavioral and social research	9
TOTAL	$251 Million

OPTION 11

OPTION 9 PLUS — $147

o The proposed Youth and Family Services authority	75
o Additional biomedical, behavioral and social research	9
o Require States to pay for medical contraceptive services for Medicaid eligibles through Medicaid rather than title XX	15
TOTAL	$247 Million

EXHIBIT 6-7 (continued)

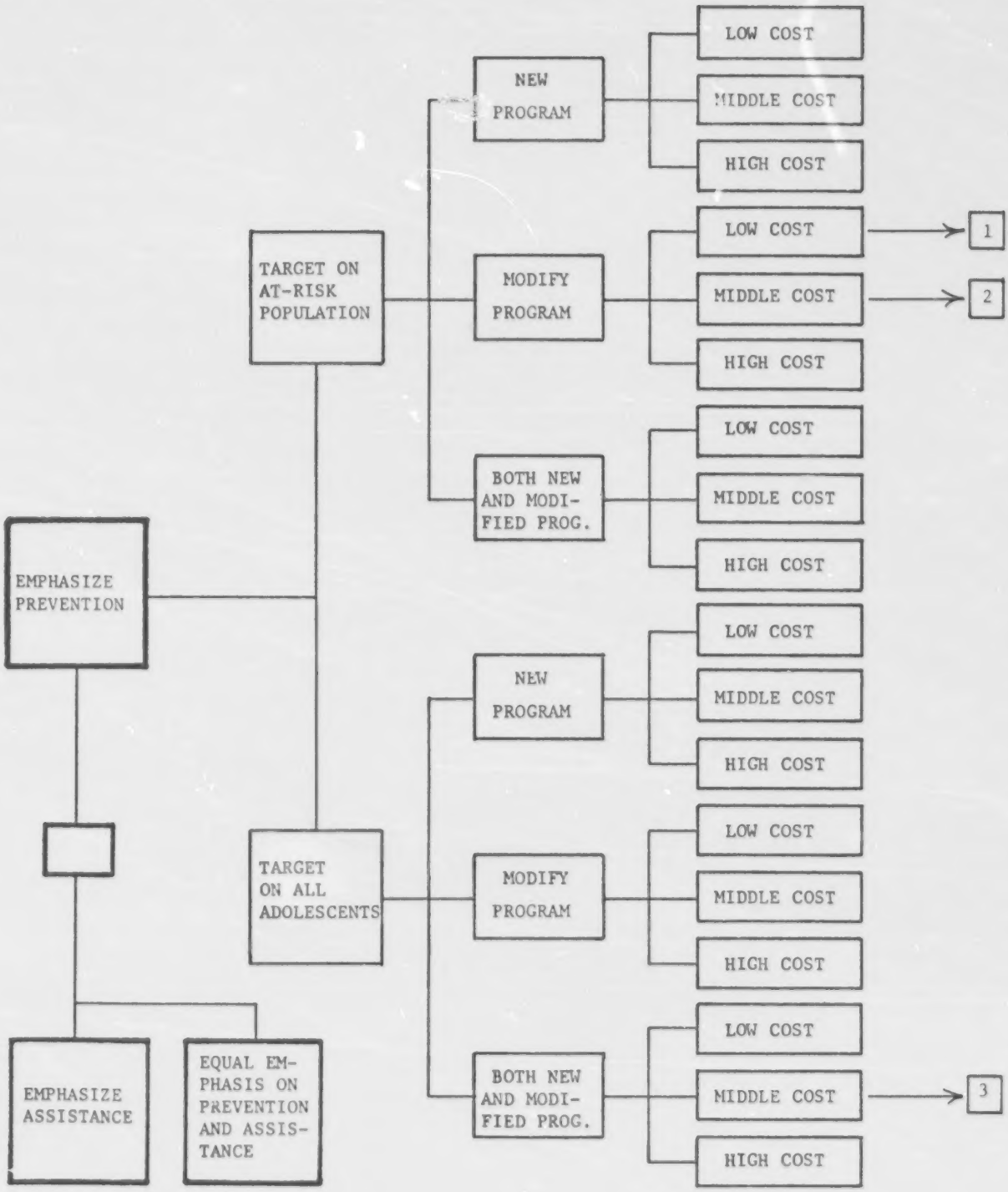
EMPHASIZE PREVENTION
TARGET ON AT-RISK POPULATION
NEW PROGRAM
LOW COST
MIDDLE COST
HIGH COST
MODIFY PROGRAM
LOW COST
MIDDLE COST
HIGH COST
1
2
BOTH NEW AND MODI-FIED PROG.
LOW COST
MIDDLE COST
HIGH COST
TARGET ON ALL ADOLESCENTS
NEW PROGRAM
LOW COST
MIDDLE COST
HIGH COST
MODIFY PROGRAM
LOW COST
MIDDLE COST
HIGH COST
BOTH NEW AND MODI-FIED PROG.
LOW COST
MIDDLE COST
HIGH COST
3
EMPHASIZE ASSISTANCE
EQUAL EMPHASIS ON PREVENTION AND ASSISTANCE

EXHIBIT 6-8

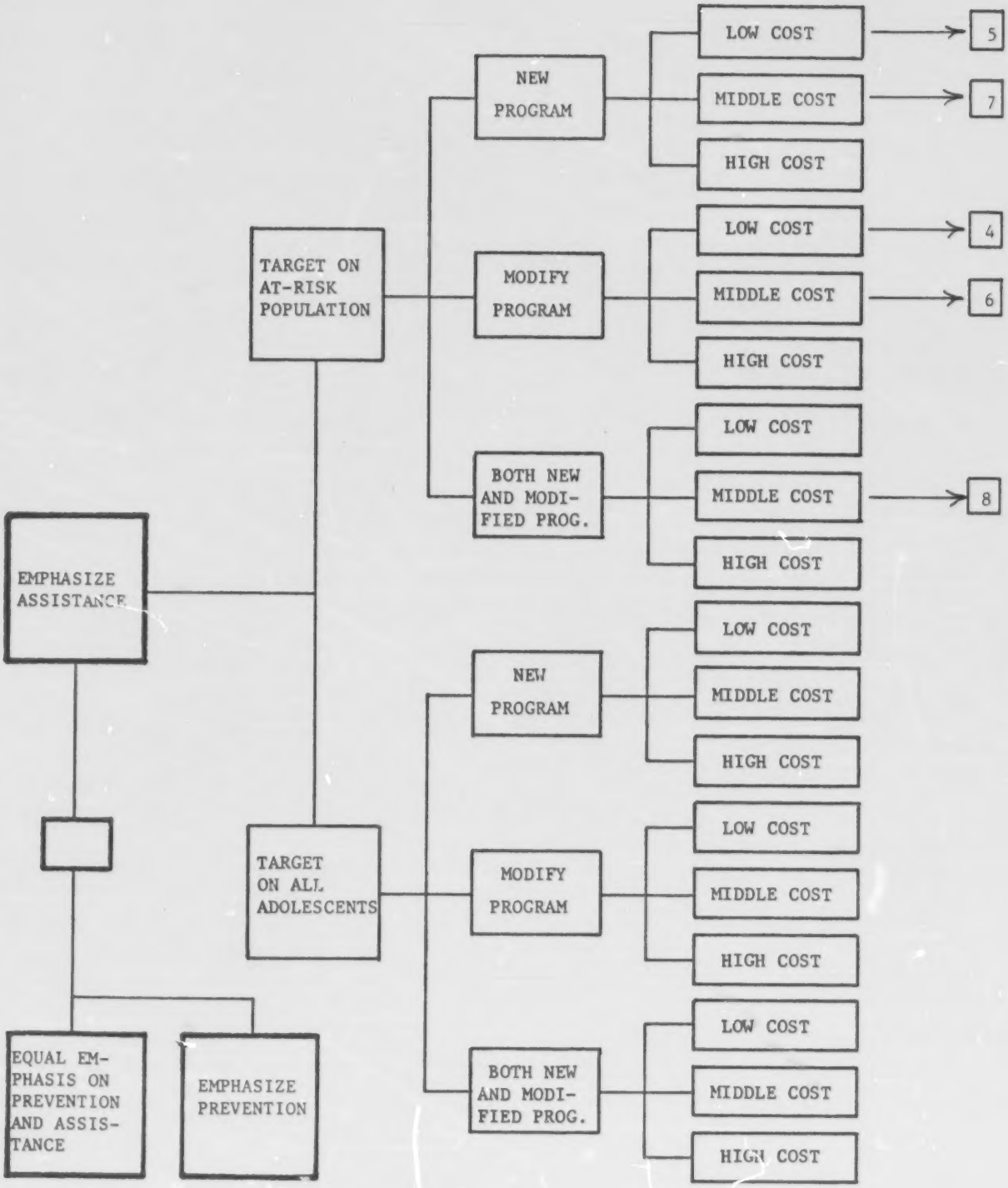

EXHIBIT 6-8 (continued)

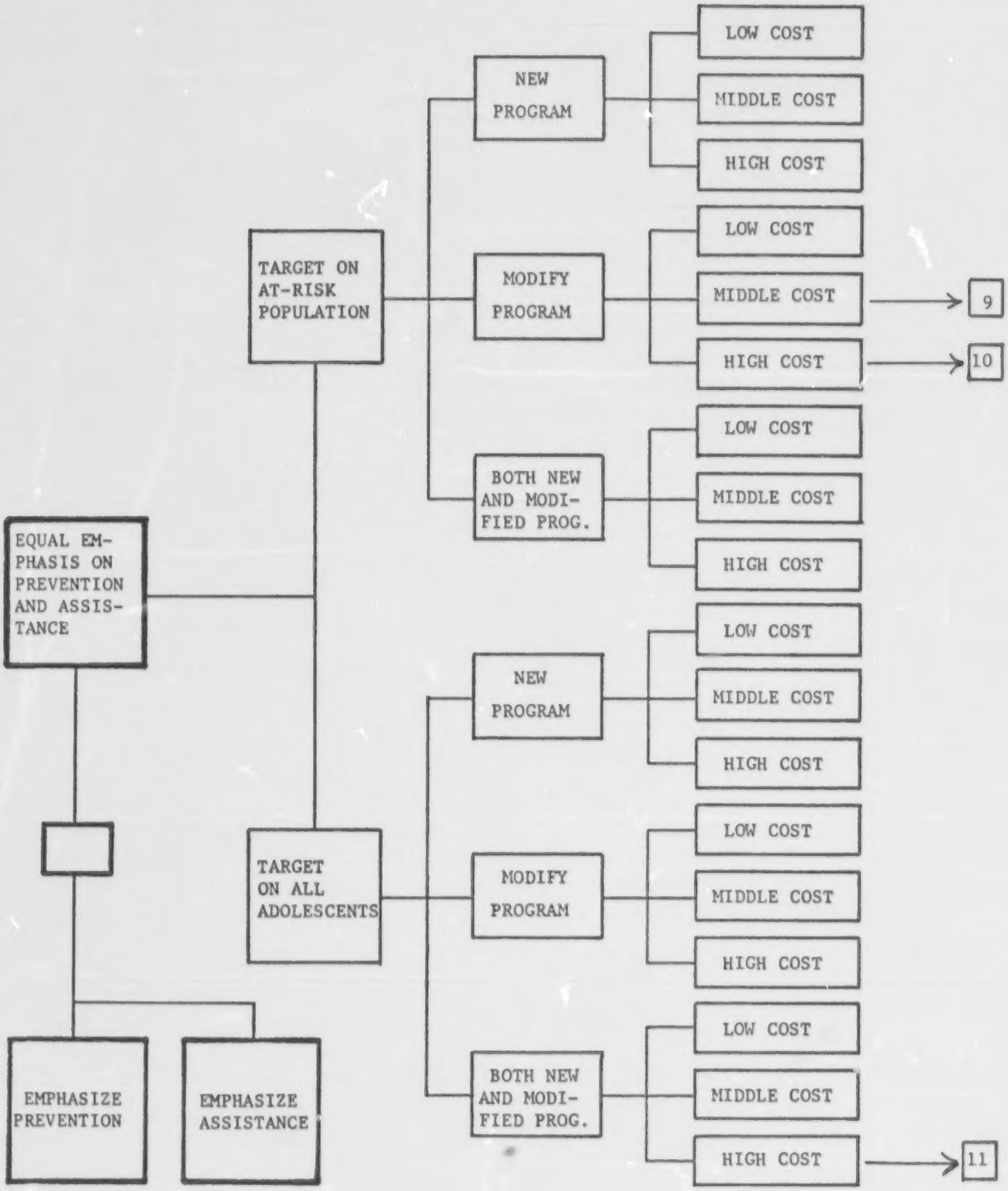

EXHIBIT 6-8 (continued)

to pregnant adolescents and adolescent parents, the recommendation was that both should be emphasized. The argument was that at low cost "undesirable tradeoffs must be made between a preventive package and a package which would improve service for pregnant adolescents and adolescent parents." This conclusion apparently stems from research findings indicating that preventive programs neither are nor would be totally effective, and that negative consequences cannot be ignored for those who in fact do become pregnant. Based upon this choice, program options 9-11 are judged satisfactory.

The recommendation was that pregnancy-related problems ought to be an important part of the Department's initiative, but that the overall needs of youth and adolescents must also be addressed. Programmatic options 9-11 were consistent with this recommendation, which presumably reflects the opinion that adolescent pregnancy may be regarded as a symptom of underlying problems and as but one aspect of the well-being of youth and adolescents.

The recommendation concerning whether Department initiatives ought to be based upon new programs or existing programs was partly predicated upon some assumptions about what could be done to modify existing programs, and, more importantly, assumptions about what new programs might be like. As mentioned, the new programs considered were Youth and Family Services and Support (targeted on all youth) and comprehensive programs for pregnant adolescents and adolescent parents (targeting on adolescent pregnancy, and similar to the program introduced by Kennedy/Bayh). Both, quite clearly, are germane to a joint emphasis upon adolescent pregnancy and adolescents more generally, and neither ought to be eliminated from consideration. Thus, the recommendation was for appropriate modifications of existing programs, and, within new programs, for inclusion of services for all adolescents with the open option of stressing services for problems related to adolescent pregnancy.

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CHAPTER 7: INFORMATION FACILITIES AND ANALYSES

The first five chapters of this book presented information indicative of demographic trends, conditions, needs and problems, and described programs designed to benefit children and families. In the preceding chapter, the discussion shifted to case studies describing how it has been used in the past. Although the case studies illustrated that information is explicitly used in decisions affecting children and families, no discussion of information and its utilization would be complete without a discussion of how information might be better used. Accordingly, the subject of this chapter is the use of information more efficiently and effectively in the future.

Many critiques of information and its utilization have taken an essentially negative approach, focusing on instances in which information was not used. Thus, many reports on information utilization conclude by lamenting the fact that information "gaps" exist or by exhorting federal or other sponsors to fund studies to fill these gaps. In doing so, these critics avoid the tendentious issues involved in describing how information that does exist might be used more efficiently and effectively. This chapter is divided into two major sections, reflecting the distinction between how one obtains information and what one then does with it. The first section examines the efficiency with which information is acquired and disseminated. Acquisition and dissemination of information are particularly critical because there are relatively few central information facilities or clearinghouses focusing on children, and those that do exist typically do not have active dissemination functions and potential users

are often unsure about how they might acquire information from them. The second section of this chapter addresses an equally pervasive problem in the utilization of information: namely, policymakers, planners, evaluators, program personnel, and others who make decisions often do not know how to incorporate information into a decision process or analysis. Thus, the second section will emphasize how information may be used for more effective decision making.

Section I - Acquisition and Dissemination of Information: The NCCAN Information Clearinghouse

There are many different ways in which information is acquired and disseminated, most of which are very inefficient. For example, one relatively costly and slow way to obtain information is to query national experts and hold roundtable discussions, much as DHEW did for its deliberations on adolescent pregnancy policies and programs (see Chapter 6). However, most potential users of information--whether they are at the federal, regional, state, or local level--do not have the resources or facilities to obtain information via such time-consuming, and costly means.

Many potential users of information about children and families are also unaware of the numerous sources from which information can be obtained.* A problem is that these sources are highly fragmented and diffuse, and are

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*In previous work for the Office of Child Development (now the Administration on Children, Youth, and Families) completed by Herner and Company, the need for central information resources or information clearinghouses was evident. Most potential users of information were aware only of the more publicized federal and commercial sources. Although some persons reported using these sources, the sources cited encompass only a fraction of the potentially useful information--implying that existing information is acquired and disseminated through very inefficient means and suggesting extreme underutilization of information.

often designed to serve audiences other than those concerned with children and families. As mentioned, there are few central information resources or clearinghouses which can efficiently provide the user with information on children. As the GAO (1977) reported, social research and development information has been ineffective in part because of a lack of appropriate dissemination and inaccessibility of results. An exception, at the state level, is the Family and Child Statistics (FACS) Information System, developed and maintained by the Early Childhood Development Division of the Texas Department of Community Affairs; the FACS Information System provides county-by-county computer printouts on a variety of conditions and programmatic services and permits certain on-line data analyses.* At the national level, the Information Clearinghouse of the National Center for Child Abuse and Neglect (NCCAN) provides an illustrative example of how both program and research information can be more efficiently acquired and disseminated.**

The NCCAN Information Clearinghouse provides both research and program information on a variety of topics related to child abuse and neglect. The Clearinghouse disseminates information through a variety of means, including a directory or programs, abstracts of research and the literature, a catalog of audiovisual materials, and topical papers. The Clearinghouse also maintains a searching service, enabling users to write or telephone for information. A more detailed description of the Clearinghouse (Berninger, 1977) appeared in Child Abuse and Neglect Reports. The description in the box was excerpted from that article.***

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*Jeannette Watson is the Division Director and Diann McKee is serving as Project Director for the FACS Information System. Either may be contacted for information regarding the project through P.O. Box 13166 Capitol Station, Austin, Texas, 78711.

**The NCCAN Information System is maintained by Herner and Company; the Project Director for Herner and Company is Douglas Berninger.

***Readers interested in obtaining copies of Child Abuse and Neglect Reports should contact NCCAN Clearinghouse, P.O. Box 1182, Washington, D.C. 20013.

The American public is hearing more and more about the plight of the abused and neglected child through newspapers, radio, and television, and is learning that brutality in the home is much too common. Projects and programs are operating all over the country to remedy, diminish, or control this problem. These activities require vast stores of information to be effective. They need answers to questions such as these (and many others):

How can volunteers be used effectively in treatment programs?

What should a social worker do to prepare for a court appearance?

Which state laws provide guardian ad litem representation for the child in the prosecution of an abuser?

What family conditions are most often associated with abuse or neglect?

How do nurses, doctors, lawyers, policemen, teachers, and other professionals recognize a reportable case of child abuse?

What training materials exist that would best meet the needs of personnel involved in child protection?

What are the causes of failure to report suspected cases?

What is the relative effectiveness of family-oriented treatment programs?

Mission of the Clearinghouse

Providing information relating to these questions and keeping track of research, programs, and other work in the field are basic functions of the information Clearinghouse created in 1975 as a component of the National Center on Child Abuse and Neglect (NCCAN). The Clearinghouse does not deal directly with the management of cases involving the perpetrators or victims of abuse and neglect, but the information it collects, organizes, and disseminates helps those who do. This information is disseminated via a directory of programs, abstracts of current research projects and literature, a catalog of audiovisual materials, and topical papers on child abuse and neglect. Further, the computerized file that the Clearinghouse has been using to answer inquiries can now be searched directly by public and private organizations around the country.

The Clearinghouse is the backbone of the National Center's information dissemination program. The central feature of the Clearinghouse is a computerized file containing information beneficial to professional practitioners, researchers, administrators, and the informed lay public.

Collecting Up-to-Date Information

The Clearinghouse has been systematically collecting information on several aspects of child abuse and neglect:

Ongoing programs that offer services directly or indirectly to children, adults, and families.

Published documents, journal articles, books, reports, dissertations, and other material containing the results and findings of research and demonstration projects.

Current research projects that are being conducted to investigate and explain child abuse and neglect.

Public awareness posters, television and radio spots, etc., to publicize programs and inform the general public about child abuse and neglect.

State-wide abuse and neglect programs, including their organization, staffing, services, clientele, operations, and funding.

Training materials for improving the skills of professional and paraprofessional workers in preventing, identifying, and treating child abuse and neglect.

State legal references identifying the statutes that have been enacted for dealing with child abuse and neglect.

The literature is one of the foremost sources of information for the Clearinghouse. Analysts regularly scan journals, abstracting and indexing publications, newsletters, directories, and other sources for information on the medical, social welfare, mental health, and legal aspects of child abuse and neglect. The Clearinghouse also uses special questionnaires to collect information about current research and on-going programs. These are sent to organizations throughout the country each year in order to identify new projects and programs and to keep up with changes in existing ones. Personal contact is another method of collecting information. The Clearinghouse is eager to know who is active in the field and to hear, or receive information, directly from these organizations.

Information from all of the foregoing sources is reviewed, abstracted, and indexed. It becomes part of the NCCAN data base computerized storage and retrieval system, and it reappears in a variety of dissemination products and services.

Searching the NCCAN Data Base

One dissemination activity of the Clearinghouse is provided by its "child abuse and neglect searching service." This unit receives questions through correspondence and telephone calls (202-293-2608), and answers these inquiries by locating specific facts, preparing or updating bibliographies, compiling special listings, etc.

Information in the NCCAN files can be searched from an on-line terminal by selected subjects, authors, program directors, research investigators, organizations, or combinations of these...

The files for child abuse and neglect documents, programs, and research projects are now accessible to the public through DIALOG, a commercial information retrieval service operated by Lockheed Information Systems, 3251 Hanover Street, Palo Alto, CA 94304. Organizations and agencies desiring to perform their own searches, and having a

suitable computer terminal, may enter into a subscription-like arrangement directly with the DIALOG service.

Publications of the Clearinghouse

The Clearinghouse prepares annual compendia of research and programs, which are sold to the public by the National Technical Information Service, 5285 Port Royal Road, Springfield, VA. 22161.

CHILD ABUSE AND NEGLECT RESEARCH: PROJECTS AND PUBLICATIONS contains informative abstracts of published documents and descriptions of current federally and privately funded research projects. Author and subject indexes for publications, and investigator, organization, financial sponsor, and subject indexes for projects are included. The first volume, published in May 1976 (PB 251 010), was supplemented in November 1976 (PB 260 800). These two volumes cost $25; single copies cost $15.

CHILD ABUSE AND NEGLECT PROGRAMS contains brief descriptions of child abuse and neglect programs administered by private and public organizations in the United States. The directory describes services, clientele, staffing, organization, coordination, and funding of each program and includes a program director index, organization index, and subject index. The first volume, published in May 1976 (PB 253 650, $11), was supplemented in November 1976 (PB 259 001, $5.

In Fall, 1977 the Clearinghouse will update these two compendia and will initiate a new publication, CATALOG OF AUDIOVISUAL MATERIALS, identifying films, slides, videotapes, audiocassettes and other nonprint materials on child abuse and neglect...

Future of the Clearinghouse ...

Studies have shown that the simpler, more familiar, or more accessible the information sought, the more informal and routine the sources consulted or used. Thus, the inherent strengths of the NCCAN Clearinghouse can be best exploited if it shares its significant resources with other "local" information centers, libraries, and organizations closer to the using public. An active effort is being made to get NCCAN information into the channels and sources closest and most familiar to those who can benefit from it.

The centralized collection performed by the NCCAN Clearinghouse broadens the information base available to everyone. By sharing its files, the Clearinghouse lessens the cost that others would bear. Thus, agencies and organizations can give more attention to monitoring recent developments, coordinating their programs, applying the results of recent research, or upgrading their skills for working with children, adults, and families.

Clearinghouses and other information facilities can provide centralized acquisition and dissemination functions which offer economies of scale, and are one means to increase efficiency in the utilization of information. For example, the NCCAN Clearinghouse helps avoid costly duplicative efforts among potential users, and provides information to persons who would not be able to afford the cost of obtaining information on their own.

Despite the benefits offered by centralized resources, most information about children, youth, and families emanates from diffuse, obscure sources, and is therefore used inefficiently or not at all. One reason for the lack of central information facilities is the current lack of commercial interest, stemming from the fact that many potential users are unable to purchase services. Another reason is that potential sponsors typically balk at the cost of developing such facilities or at the cost of continuing to maintain them. Nevertheless, clearinghouses and other centralized information resources would greatly enhance the utilization of information at all levels, federal to community.

Section II - Use of Information in Complex Decision Problems: Some Methodologic Considerations

In Chapter 6 some case studies were presented which illustrated some of the ways in which information has been used. Chapter 6 also touched upon the fact that existing information is not used as fully and effectively as it could be, for a variety of reasons. While information about children can be used in many different ways, the discussion below will be limited to its use for decision making.

Information is often underutilized after it is acquired because it is not explicitly drawn into or incorporated into the decision process; or, if it is incorporated into the decision process, it may not prove effective because it is only partially reliable, only partially relevant, or because it is partially ambiguous about what the "right" decision is. Accordingly, this section is divided into two parts. The first part focuses on incorporating information into the decision process. A simple model of the planning process will be described, which illustrates how information might be used more effectively. The second part discusses how information may impinge upon the decision analysis itself, and how it may be used to influence the judgment of the decision maker(s) in structuring the decision problem, in assessing uncertainty, and in articulating and assessing values.

A Process Model Illustrating the Use of Information

There is, of course, a large and still rapidly growing literature on decision making. Much of the literature is process oriented, and involves descriptions of the steps or sequence of activities that a decision maker or decision-making organization follows in reaching a decision. There is typically an emphasis on the different components of the decision problem, the importance of coordinating them, and the interaction between them. For example, Stufflebeam (1971) discussed decision making in the context of evaluating educational programs. While there is great variability among the approaches that have been proposed, both in terms of their specific steps and their underlying philosophies, most emphasize the use of information and its incorporation into the decision process.

Exhibit 7-1 shows a simple model whereby information can be explicitly introduced into the decision process. The particular example chosen involves

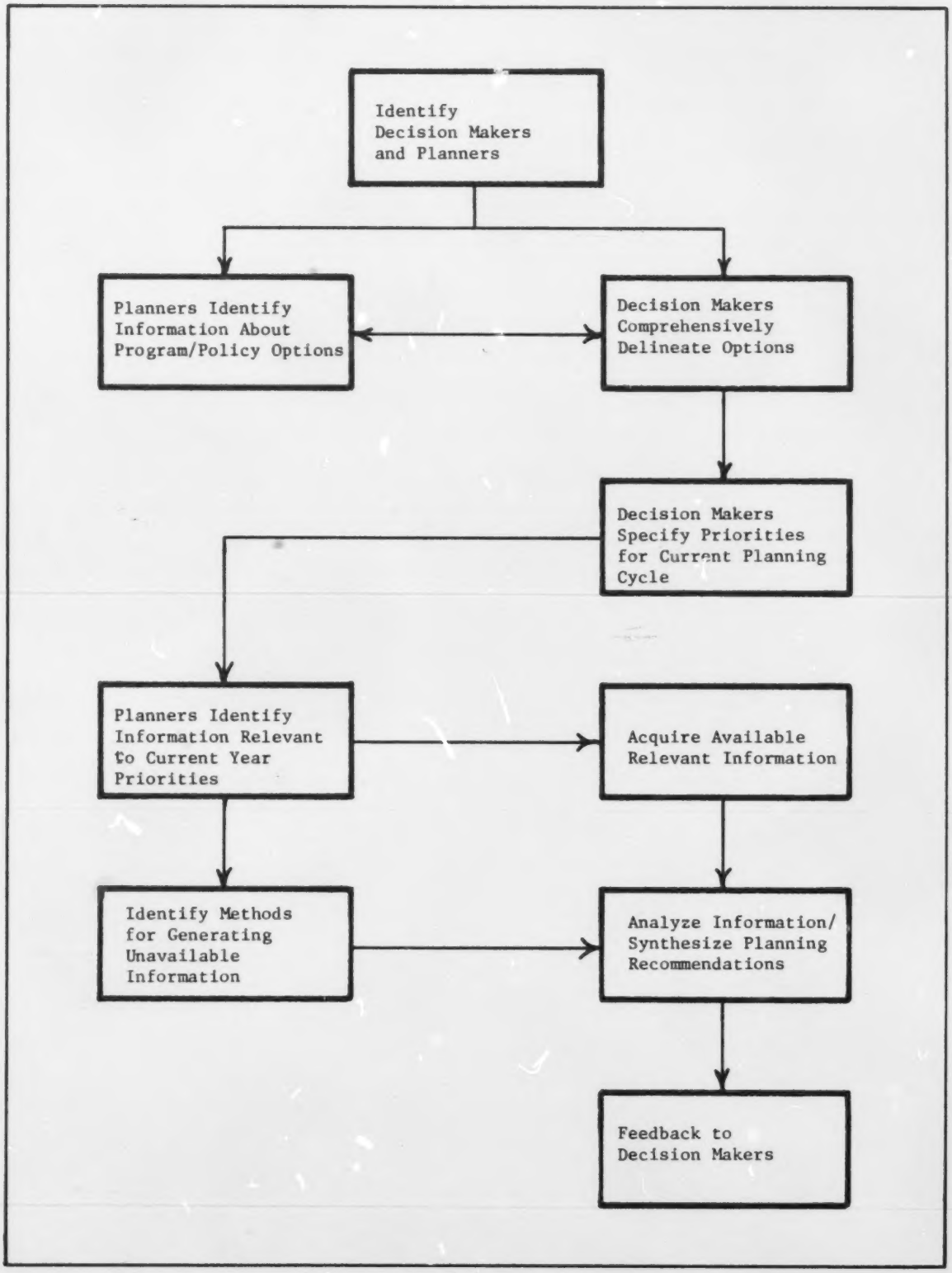
Identify
Decision Makers
and Planners
Planners Identify
Information About
Program/Policy Options
Decision Makers
Comprehensively
Delineate Options
Decision Makers
Specify Priorities
for Current Planning
Cycle
Planners Identify
Information Relevant
to Current Year
Priorities
Acquire Available
Relevant Information
Identify Methods
for Generating
Unavailable
Information
Analyze Information/
Synthesize Planning
Recommendations
Feedback to
Decision Makers

EXHIBIT 7-1

program planning and the use of information for decisions about priorities and for formulating implementation plans. Although there are other parts or components of the planning process, in addition to those focusing on information utilization, for ease of presentation these will not be considered.

The approach to information utilization illustrated in Exhibit 7-1 is based in part on a distinction between decisions about priorities and plans for implementing those priorities. The identification and acquisition of information is assumed to be a part of the planning process at several different stages.

In order to distinguish clearly between decisions about priorities and the formulation of implementation plans, a key step is to distinguish between persons responsible for setting priorities and the staff which devises plans to implement those priorities.*

Priorities should be articulated before any attempt is made to formulate implementation plans. It is important at the outset to identify and delineate all plausible options: the best options cannot be chosen unless they are included among the alternatives being considered. Information can help delineate the options. The planning staff may turn to the programmatic or research literature, for example, and compile a list of strategies for resolving a particular problem. As a more specific example, different programmatic alternatives for ameliorating child abuse and neglect might be identified by referring to the program descriptions contained in the directory prepared by the NCCAN Information Clearinghouse.

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*The distinction between decisions about priorities and plans to implement them is an important one. As noted by Drucker (1970): "There is surely nothing quite so useless as doing with great efficiency what should not be done at all."

Statistical and research information may also enter into the decision about priorities. For example, statistical information may be indicative of certain needs or the extent of a given problem; and research information may shed some light on the consequences or effect of different intervention strategies.* This type of information is of course germane to judgments about the relative importance of various objectives, and should influence the decision about priorities.

Once priorities are established for the planning cycle, planners should specify which information is relevant to the formulation of plans. This might involve, for example, state-of-the-art papers, "how to" papers, or reports about "best practices." At this step, relevant information should be specified regardless of whether it is available and can be readily acquired. Information that is available is then acquired.

Of course, there will be many information gaps, i.e., information that the planners specified as relevant and would like to have but which is not available. Thus, it may be necessary to make inferences from several existing papers, articles, and reports, although none is conclusive or diagnostic by itself. For example, the relationship between adolescent parenting and child abuse and neglect is not a proven one, but, as noted, there may be enough available information upon which to base a judicious decision.

Where missing information is critical, the planners must identify possible methods for generating that information. For example, it might be possible to conduct a special survey to determine which plan for targeting

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*The Education Commission of the States has prepared a handbook on this general topic. The Children's Needs Assessment Handbook is available from the Commission for $3.35, which includes postage and handling.

resources seems most appropriate. The value of such information for improving the planning process must of course be evaluated in relation to the cost, staff time, and other resources consumed in obtaining it.

Typically, several different strategies for implementing a given priority will emerge during the planning process. Based upon available information, pros and cons should be delineated and the trade-off among different strategies reflected in planning recommendations, which form part of an internally consistent, overall plan.

This plan, along with its justification, is then presented as feedback to the decision makers to ensure that it is responsive to the priorities earlier established. Revisions and modifications, if any, are of course made prior to implementation.

Although not represented in Exhibit 7-1, there is another extremely important form of feedback information. This is the evaluative information of program activities from prior years, which should be used to revise, refine, or replace existing programs. This type of evaluative information is clearly germane both to decisions about current-year priorities and to planners interested in the best strategies for implementing programs.

Use of Information in the Analysis of a Decision

The preceding discussion examined how information can be incorporated at one or more stages in the decision process, and how information may impact both on the setting of priorities and in devising implementation plans. The process illustrated in Exhibit 7-1 is, however, a "black box" model which does not explain how the decision itself is actually made. The discussion below

examines how information may impinge upon the judgmental and subjective aspects of the decision problem during its analysis.

In Chapter 6 a simple "decision tree" was used to describe or reconstruct the use of information in DHEW's deliberations about policies and programs pertaining to adolescent pregnancy. This same essential type of analysis, conducted before the decision is actually made, can help the decision maker to use information to structure the decision problem, make judgments and express opinions about uncertainty or probabilities, and articulate and assess values.

Decision theory and decision-analytic models provide the theoretical basis for such analyses, although, in practice, the analysis is always incomplete and always involves approximation and simplification of theoretic approaches.* While the theoretic concept of the "optimal decision" is not particularly meaningful in practical decision problems, the analysis of the decision problem can nevertheless have substantial heuristic value. Indeed, the merit of a decision analysis is that it helps one think about complex problems in simple, understandable ways.

The easiest way to present the essential concepts of decision analysis is by use of an example, which essentially illustrates an extension of the approach discussed for the adolescent pregnancy decision in Chapter 6.

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*The principles of decision theory and decision analysis will be treated informally and by way of overview. For a more detailed discussion of decision analysis, see Brown, Kahr, and Peterson (1974). For a detailed discussion of "personal probabilities" and Bayesian statistical theory, see Philips (1963). Keeney and Raiffa (1976) provide a thorough discussion of values and utility theory. For case studies emphasizing practical applications involving complex decision problems, see Snapper (1978).

The example, while not particularly germane to children, has the advantage of being a familiar one. The analysis was based upon information appearing in the public media about mid-1976, and is intended only for illustrating the techniques; it is explicitly not intended as a critique of the swine flu program or the decision process used.

A simple analysis of the swine flu decision. The need for a decision regarding the swine flu became apparent after several soldiers were stricken with the virus. Experts became concerned that there might be another epidemic similar to the one in 1918-1919. Experts pointed out that any new strain of virus can be followed by a high death toll and financial losses. By mid-1976 much controversy had emerged, and items about the swine flu appeared frequently in the media. Some of the most salient information gleaned from the media is shown below.

- °A new influenza strain emerges every ten years or so--and another may be about due.
- °One study estimated the chance of a swine flu epidemic as "one in ten," that is, a probability of .10.
- °The program is likely to be only partially effective, since only a fraction of the population --perhaps about half--will be immunized, and the vaccine is not likely to be effective in younger persons.
- °If an epidemic were to occur without an immunization program, one study estimated that about 1/4 of the population--or over 50 million persons--would contact the disease.
- °Estimates were that about 50,000 people would die from the disease, if an epidemic were to occur.
- °President Ford requested $135 million to initiate the program.
- °In the event of an epidemic, one study estimated financial costs at about $6 billion.
- °Financial losses were $3.2 billion in 1968-1969, even with antibiotics.
- °Adverse reactions, varying in severity, develop in persons immunized against influenza.

°Even with antibiotics, there were 28,000 flu-related deaths in 1968-1969.

°As of June, 1976, there was no outbreak of swine flu in the southern hemisphere, where outbreaks precede those in the northern hemisphere by six months.

Although other options might have been considered, there were only two serious contenders. The first was to implement a Swine Flu Immunization Program, and the second was Do Nothing. The choice can be crudely represented by Exhibit 7-2, and poses some interesting tradeoffs.

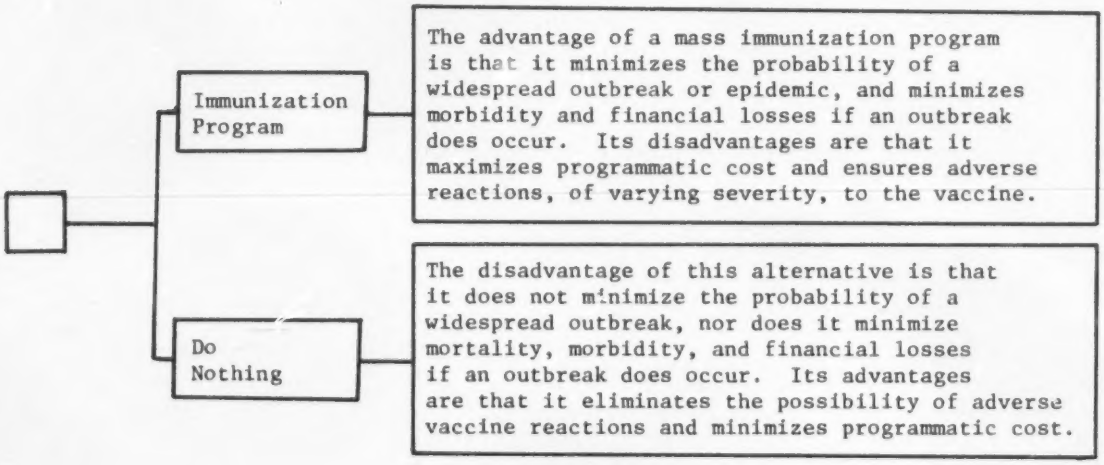
Immunization Program
The advantage of a mass immunization program is that it minimizes the probability of a widespread outbreak or epidemic, and minimizes morbidity and financial losses if an outbreak does occur. Its disadvantages are that it maximizes programmatic cost and ensures adverse reactions, of varying severity, to the vaccine.
Do Nothing
The disadvantage of this alternative is that it does not minimize the probability of a widespread outbreak, nor does it minimize mortality, morbidity, and financial losses if an outbreak does occur. Its advantages are that it eliminates the possibility of adverse vaccine reactions and minimizes programmatic cost.

EXHIBIT 7-2

Obviously there are some important social values involved in this decision, and some tradeoffs which must be assessed. The nature of these tradeoffs may be clarified by noting that outcomes vary along multiple dimensions, which include: cost of program implementation, adverse vaccine reactions, financial losses (remedial treatment, lost working time, etc.),

morbidity (illness), and mortality (deaths). Only the last will be considered in detail in this chapter.

One purpose of structuring the decision problem is to elucidate the conditional relations between the options and the possible outcomes. Many sources of uncertainty were involved in the swine flu decision, including the probability that there would be an outbreak of the flu (if at all), the extent of the outbreak (if any), and the effectiveness of antibiotics (in curing pneumonia, as a complication of the flu). These conditionalities can be represented as shown in Exhibit 7-3. This exhibit focuses only upon the outcome dimension of mortality, and included some estimates about the possible number of deaths and the probability of each outcome. (Note: some of these are personal estimates, which are extrapolations or interpolations consistent with the expert opinions expressed in the media.)

The estimates in Exhibit 7-3 suggest a decrease in the expected number of deaths by implementing the program. Essentially, this decrease occurs because the program would provide a "hedge" against a very unlikely but serious outbreak or epidemic. Of course, the decision would also have to take into consideration the possibility of adverse vaccine reactions and the other outcome dimensions. While the example could be extended to consider the implied tradeoffs more fully, the example as represented in Exhibit 7-3 is sufficient for the purposes of this chapter.

To reiterate, the purpose of such an analysis is heuristic, and intended to help the decision maker think in simple and organized ways about a decision problem. The structuring of the problems, as reflected in the tree, is based upon information about conditionalities, i.e., the consequences of certain decisions or other events. Information is also relevant to values,

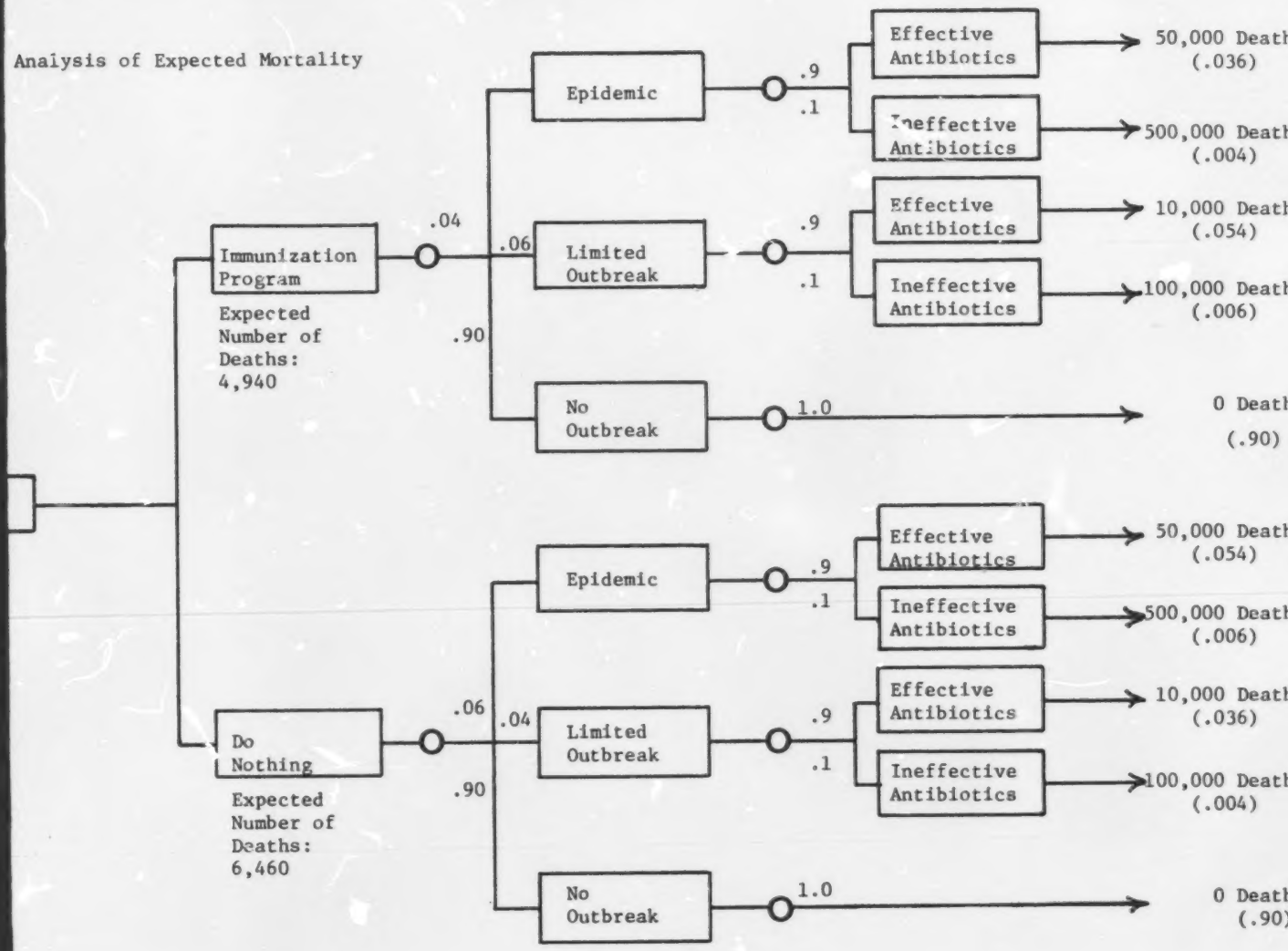
Analysis of Expected Mortality
Immunization Program
Expected Number of Deaths: 4,940
.04
.06
.90
Epidemic
.9
.1
Effective Antibiotics
50,000 Death
(.036)
Ineffective Antibiotics
500,000 Death
(.004)
Limited Outbreak
.9
.1
Effective Antibiotics
10,000 Death
(.054)
Ineffective Antibiotics
100,000 Death
(.006)
No Outbreak
1.0
0 Death
(.90)
Do Nothing
Expected Number of Deaths: 6,460
.06
.04
.90
Epidemic
.9
.1
Effective Antibiotics
50,000 Death
(.054)
Ineffective Antibiotics
500,000 Death
(.006)
Limited Outbreak
.9
.1
Effective Antibiotics
10,000 Death
(.036)
Ineffective Antibiotics
100,000 Death
(.004)
No Outbreak
1.0
0 Death
(.90)

EXHIBIT 7-3

and in this case was used to evaluate outcomes in terms of morbidity. Information can also help estimate the probability of outcomes; thus, one estimate placed the probability at .10 (or "ten percent").

Problem definition--a less formal way of structuring decisions. Both the swine flu example and the DHEW deliberations on adolescent pregnancy were similar in an important respect: in both instances the nature of the problem was reasonably well-defined ahead of time. And, in both cases, there was a substantial amount of information which could be used to guide one's thinking.

When the problems facing the decision maker are new and unfamiliar, complex, or otherwise ill-defined for the decision maker, even the simple tree analyses may prove premature. The decision may be fuzzy, in the sense that it is not even clear what the decision is supposed to be about. There may also be no comprehension of what the options might be, or what information might be relevant and available to aid in the decision process. The step of making a preliminary and rudimentary analysis of the decision has been referred to as "problem definition."

Problem definition is an important pre-decisional process, because it can help in the a priori identification of what information is relevant, as described in connection with Exhibit 7-1. Some preliminary work which was completed for use by planning agencies or planning units is illustrative of how aspects of some types of problems can be defined. The approach involved a guidebook, which presented the user with some options for describing the kind of decision-making function(s) he or she had, and the general category(ies) of information which were potentially relevant. The matrix defined by these decision-making functions and information categories is shown in Exhibit 7-4.

CATEGORIES OF DECISIONMAKING FUNCTIONS	CATEGORIES OF SUBSTANTIVE INFORMATION								
	Health Risk			Educational Risk			Social and Environmental Factors		
	Physical Development and Processes	Physical Handicapping/ Limiting Conditions	Etiology and Causal Factors	Educational Development and Processes	Educational Handicapping/ Limiting Conditions	Etiology and Causal Factors	Demographics	Environmental Factors	Program/Services Status
Intra-System Functions and Decisions	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9
Inter-System Functions and Decisions	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9
Public Information Functions and Decisions	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9
Research Planning Functions and Decisions	D-1	D-2	D-3	D-4	D-5	D-6	D-7	D-8	D-9
Other (Specify):	E-1	E-2	E-3	E-4	E-5	E-6	E-7	E-8	E-9

EXHIBIT 7-4

The purpose of the matrix was to help delineate all the possible topical areas of interest, and to enable the user of the guidebook to focus on only the most important and salient of them. Either by inspecting the matrix directly, or by using a simple rating procedure built into the guidebook, the user would select a few cells for possible further consideration. For the selected cells, the guidebook provided a finer, more detailed break-out of information categories and specific types of decision-making functions to help the user analyze and define the nature of the decision more carefully.

Without discussing this type of approach further, it is interesting to note that it is consistent with the simple process model shown in Exhibit 7-1. It helps to clarify the nature of the decision and the kinds of information relevant to it. Such a "definition" of the problem could also serve as a prelude for a more structured analysis such as that shown for the swine flu.

Values and Decisions. In a number of decision problems the essential question is one of value. Thus, for example, state planning processes that involve needs assessment are essentially attempting to use information to help articulate and assess values. As another example, in Chapter 6 the use of county-by-county statistical information to assess medical underservedness was discussed. The index of medical underservedness, used to target Health Maintenance Organizations, essentially served to place a different value on alternative program sites, and provides an example of a "social indicator" approach to needs assessment.

The value-oriented nature of needs assessment, in the context of state-level efforts "to gather data and assess early childhood needs," is described in "Social Indicators and Early Childhood Assessment in Texas" (Appendix D, in The Children's Needs Assessment Handbook). Four steps are

described. These steps are identification of problems, idenficiation of important data in the analysis of these problems, cataloging (or compilation) of data, and cataloging and interpretation of the meaning of the indicators themselves. The discussion goes on to indicate that such needs assessments are merely inputs to decisions, and that other factors come into play. That is, a needs assessment is but one component in the analysis of a social decision.

Uncertainty. Although the subjective nature of values in decision making is widely recognized, the subjective nature of uncertainty is little noted and largely ignored. To illustrate, in describing value judgments, the aforementioned appendix on Texas needs assessment posed the question: "Is it better to educate 50 children of migrant agricultural workers in English or to prevent one infant death?" In addition to the serious questions about value such judgments raise, there are also questions about uncertainty. For example, how would a planner know that a given intervention would be effective and that it would result in the anticipated reduction in number of deaths. Or, for that matter, how would an evaluator ever be really certain that reductions were in fact attributable to a given intervention. Clearly, there is always uncertainty about the impact or effect of a decision--all that varies is the degree of uncertainty.

Much mischief results because people do not recognize that decisions always involve uncertainty, and that information serves primarily to alter or modify one's judgments or opinions about that uncertainty. They are prone to discount the usefulness of available "soft" information, and to call for further research to generate some "hard" data. Or, they may argue that rigorous evaluations are needed to "prove" that a given intervention would be efficacious. As mentioned at the beginning of this chapter, one result is that some critics merely cite gaps and weaknesses in available information,

rather than focusing on how information that does exist could be used more efficiently and effectively.

Nevertheless, in practical settings decisions cannot be deferred and must be made under uncertainty and partially unreliable or ambiguous information. Initially, estimates about the probability or likelihood of impacts or effects may be partly or wholly subjective--although they may subsequently be revised in light of new or "hard" information. Without going into detail here, "personalistic probability" theory and Bayesian statistical theory provide a formally appropriate model for synthesizing prior subjective estimates of uncertainty with "hard" data, and for revising those estimates on the basis of that data. Philips (1973) describes the basic approach:

> "A probability is a degree of belief held by a person about some hypothesis, event or uncertain quantity. This definition of probability contrasts to the more traditional view in which a probability is seen as the limit of a relative frequency...
>
> "The 'personalist' definition of probability does not lead to a subjective view of statistics, however. Before any data have been observed, opinions will, naturally, differ. But after data have been collected, it is possible to apply Bayes' theorem, and then the revised probabilities will be in closer agreement. With enough data, initially divergent opinions will become nearly indistinguishable. It is the revision of opinion that is linked to observations."

Thus, for example, planners of children's programs may have to make decisions about which intervention is "likely" to be most effective, based on perhaps no more than their own expertise and prior experience with such intervention techniques. There may and probably will be disagreement; but examining the reasons for that disagreement is useful in helping to analyze and structure the decision problem. Indeed, identifying and making explicit sources of disagreement (by using a decision tree analysis, for example) can and often does lead to consensus and agreement about what the preferred

option is, although there might be differences in detail about why that is the preferred option.

A Final Note on the Use of Information About Children

Returning to the issue of whether information about children is worthwhile, the most critical factor may be the subjective nature of decisions rather than the intrinsic "usefulness" of the information. All decisions involve subjective judgments, both about uncertainty and about values, and information can be at best descriptive, never prescriptive. The touchstone for whether information is worthwhile or not is a matter of judging whether decisions made with information are better than unaided and uninformed intuition. In this regard, there can be little doubt that information does profoundly shape the decision process--although one may be hard pressed to describe introspectively just how that happens.

One could argue, therefore, that most of the impact of information about children is unobserved. Merely being informed and keeping others informed about the status of children will influence the opinions of many and shape the decisions of some. However, there is no doubt that the worth of information about children could be increased by better linking the user with the information, through more efficient dissemination and acquisition processes, and through other, more direct strategies for infusing or incorporating information into the decision process.

APPENDIX· FEDERAL PROGRAMS

DEPARTMENT OF AGRICULTURE

Farmer's Home Administration

10.405 Farm Labor Housing Loans and Grants
10.410 Low to Moderate Income Housing Loans
10.411 Rural Housing Site Loans
10.415 Rural Rental Housing Loans
10.417 Very Low-Income Housing Repair Loans and Grants
10.420 Rural Self-Help Housing Technical Assistance

Extension Service

10.500 Cooperative Extension Service

Food and Nutrition Service

10.550 Food Distrubution
10.551 Food Stamps
10.553 School Breakfast Program
10.554 Nonfood Assistance for School Food Service Program
10.555 National School Lunch Program
10.556 Special Milk Program for Children
10.557 Special Supplemental Food Program for Women, Infants, and Children
10.558 Child Care Food Program
10.559 Summer Food Service Program for Children

Forest Service

10.661 Youth Conservation Corps-Grants to States

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service - I

13.210 Comprehensive Public Health Services-Formula Grants
13.211 Crippled Children's Services
13.217 Family Planning Projects
13.224 Community Health Centers
13.226 Health Services Research and Development-Grants and Contracts
13.228 Indain Health Services-Health Mamagement Development Program
13.229 Indian Health Services-Sanitation Management Development Program
13.231 Maternal and Child Health Research
13.232 Maternal and Child Health Services
13.233 Maternal and Child Health Training
13.235 Drug Abuse Community Service Programs
13.237 Mental Health-Hospital Improvement Grants
13.238 Mental Health-Hospital Staff Development Grants
13.239 Narcotic Addict Rehabilitation Act Contracts
13.240 Community Mental Health Centers-Staffing and Construction
13.242 Mental Health Research Grants
13.246 Migrant Health Grants
13.251 Alcohol Community Service Programs
13.252 Alcohol Demonstration Programs
13.254 Drug Abuse Demonstration Programs
13.256 Health Maintenance Organization Development

Public Health Service (Continued)

13.257 Alcohol Formula Grants
13.258 National Health Service Corps
13.259 Mental Health-Children's Services
13.260 Family Planning Services-Training Grants and Contracts
13.266 Childhood Lead-Based Paint Poisoning Control
13.267 Urban Rat Control
13.268 Disease Control-Project Grants
13.269 Drug Abuse Prevention Formula Grants
13.271 Alcohol Research Development Awards
13.272 Alcohol National Research Service Awards for Research Training
13.273 Alcohol Research Programs
13.275 Drug Abuse Education Programs
13.277 Drug Abuse Research Development Awards
13.278 Drug Abuse National Research Service Awards for Research Training
13.279 Drug Abuse Research Programs
13.280 Drug Abuse Clinical or Service Related Training Programs
13.281 Mental Health Research Development Awards
13.282 Mental Health National Research Service Awards for Research Training
13.283 Center for Disease Control-Investigations,Surveillance and Technical Assistance
13.284 Emergency Medical Services
13.289 President's Council on Physical Fitness and Sports
13.290 Special Alcoholism Projects to Implement the Uniform Act
13.292 Sudden Infant Death Syndrome Information and Counseling Program
13.293 State Health Planning and Development Agencies
13.294 Health Planning-Health Systems Agencies
13.295 Community Mental Health Centers-Comprehensive Services Support

Office of Education

13.403 Bilingual Education
13.410 Dropout Prevention
13.420 Alcohol and Drug Abuse Prevention
13.427 Educationally Deprived Children-Handicapped
13.428 Educationally Deprived Children-Local Educational Agencies
13.429 Educationally Deprived Children-Migrants
13.430 Educationally Deprived Children-State Administration
13.431 Educationally Deprived Children in State Administered Institutions Serving Neglected or Delinquent Children
13.433 Follow Through
13.443 Handicapped-Research and Demonstration
13.444 Handicapped Early childhood Assistance
13.445 Handicapped Innovative Programs-Deaf-Blind Centers
13.446 Handicapped Media Services and Captioned Films
13.449 Handicapped Preschool and School Programs
13.450 Handicapped Regional Resource Centers
13.451 Handicapped Personnel Preparation
13.452 Handicapped Teacher Recruitment and Information
13.477 School Assistance in Federally Affected Areas-Construction
13.478 School Assistance in Federally Affected Areas-Maintenance and Operation
13.482 Special Services for Disadvantaged Students
13.488 Talent Search
13.489 Teacher Corps-Operations and Training
13.492 Upward Bound
13.493 Vocational Education-Basic Grants to States
13.494 Vocational Education-Consumer and Homemaking

Office of Education (Continued)

13.495	Vocational Education-Program Improvement and Suppoertive Service
13.498	Vocational Education-Program Improvement Projects
13.499	Vocational Education-Special Needs
13.512	Educationally Deprived Children - Special Incentive Grants
13.520	Special Programs for Children with Specific Learning Disabilities
13.522	Environmental Education
13.525	Emergency School Aid Act-Basic Grants to Local Educational Agencies
13.526	Emergency School Aid Act-Pilot Programs (Special Programs and Projects)
13.528	Emergency School Aid Act-Bilingual Education Projects
13.529	Emergency School aid Act-Special Programs and Projects (Non-Profit Organizations)
13.530	Emergency School Aid Act-Educational Television
13.532	Emergency School Aid Act- Special Programs
13.533	Right to Read-Elimination of Illiteracy
13.534	Indian Education-Grants to Local Educational Agencies
13.535	Indian Education-Special Programs and Projects
13.549	Ethnic Heritage Studies Program
13.551	Indian Education-Grants to Non-Local Educational Agencies
13.558	Bilingual Vocational Training
13.560	Regional Education Programs for Deaf and Other Handicapped Paersons
13.562	Education for Gifted and Talented Children and Youth
13.565	Women's Educational Equity
13.568	Handicapped Innovative Programs-Programs for Severely Handicapped Children
13.571	Educational Innovation and Support
13.586	Bilingual Vocational Instructor Training
13.587	Bilingual Vocational Instructional Materials, Methods, and Techniques

Office of Human Development Services

13.600	Child Development-Head Start
13.603	Office for Handicapped Individuals
13.608	Child Development-Child Welfare Research and Demonstration Grants
13.612	Native American Programs
13.623	Runaway Youth
13.628	Child Development-Child Abuse and Neglect Prevention and Treatment
13.630	Developmental Disabilities-Basic Support
13.631	Developmental Disabilities-Special Projects
13.632	Developmental Disabilities-Demonstration Facilities and Training
13.640	Youth Research and Development
13.642	Social Services for Low Income and Public Assistance Recipients
13.644	Public Assistance Training Grants-Title XX
13.645	Child Welfare Services
13.646	Work Incentives Program-Child Care-Employment Related Supportive Services
13.648	Training Grants in the Field of Child Welfare
*	Public Assistance-Social Services (formerly 13.754)

* Transferred in 1977 from Social and Rehabilitation Service to Office of Human Development

Office of the Secretary

13.678 Consumer Affairs
13.679 Child Support Enforcement

Health Care Financing Administration

13.714 Medical Assistance Program
13.761 Public Assistance-Maintenance Assistance (State Aid)
13.766 Health Financing Research, Demonstrations and Equipment

Social Security Administration

13.802 Social Security-Disability Insurance
13.803 Social Security-Retirement Insurance
13.805 Social Security Survivors Insurance
13.806 Special Benefits for Disabled Coal Miners
13.807 Supplemental Security Income

Public Health Service - II

13.864 Population Research
13.865 Research for Mothers and Children
13.883 National Health Planning Information Cneter

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Housing-Federal Housing Commissioner

14.103 Interest Reduction Payments-Rental and Cooperative Housing for Lower Income Families
14.104 Interest Reduction-Acquisition and Rehabilitation of Homes for Resale to Lower Income Families
14.105 Interest Reduction-Homes for Lower Income Families
14.106 Interest Reduction-Purchase of Rehabilitated Homes by Lower Income Families
14.108 Major Home Improvement Loan Insurance-Housing Outside Urban Renewal Areas
14.120 Mortgage Insurance-Homes for Low- and Moderate-Income Families
14.147 Low Income Housing-Homeownership for Low-Income Families (Turnkey III Mutual Help for Indians)
14.149 Rent Supplements-Rental Housing for Lower Income Families
14.156 Lower-Income Housing Assistance Program

Community Planning and Development

14.218 Community Development Block Grants/Entitlement Grants
14.219 Community Development Block Grants/Discretionary Grants

Federal Disaster Assistance Administration

14.701 Disaster Assistance

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

15.101 Indian Agricultural Extension
15.103 Indian Social Services-Child Welfare Assistance
15.105 Indian Education-Contracts with Indian Tribal Organizations
15.109 Indian Education-Dormitory Operations

Bureau of Indian Affairs (Continued)

15.113 Indian Social Services-General Assistance
15.115 Indian Housing-Development
15.116 Indian Housing-Improvement
15.130 Indian Education-Assistance to Schools
15.132 Indian Social Services-Counseling
15.137 Facility School Construction Planning and Equipping

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

16.005 Public Education on Drug Abuse-Technical Assistance

Civil Rights Division

16.100 Desegregation of Public Education

Law Enforcement Assistance Administration

16.500 Law Enforcement Assistance-Comprehensive Planning Grants
16.501 Law Enforcement Assistance-Discretionary Grants
16.502 Law Enforcement Assistance-Improving and Strengthening Law Enforcement and Criminal Justice
16.503 Law Enforcement Assistance-Technical Assistance
16.516 Law Enforcement Assistance-Juvenile Justice and Delinquency Prevention-Allocation to States
16.518 Law Enforcement Assistance Administration-JJDP (Juvenile Justice and Delinquency Prevention) National Institute

DEPARTMENT OF LABOR

Employment and Training Administration

17.200 Apprenticeship Outreach
17.201 Apprenticeship Training
17.211 Job Corps
17.226 Work Incentives Program
17.228 National On-The-Job Training
17.230 Migrant and Seasonal farm Workers
17.232 Comprehensive Employment and Training Programs
17.234 Indian and Native American Employment and Training Programs

Employment Standards Administration

17.303 Miniumu Wage and Hour Standards
17.305 Women's Special Employment Assistance

APPALACHIAN REGIONAL COMMISSION

23.004 Appalachian Health Programs
23.013 Appalachian Child Development

CIVIL SERVICE COMMISSION

27.003 Federal Employment for Disadvantaged Youth-Part-Time
27.004 Federal Employment for Disadvantaged Youth-Summer
27.005 Federal Employment for the Handicapped

LIBRARY OF CONGRESS

42.001 Books for the Blind and Physically Handicapped

COMMUNITY SERVICES ADMINISTRATION

49.002 Community Action
49.005 Community Food and Nutrition
49.015 Summer Youth Recreation

VETERANS ADMINISTRATION

Department of Veterans Benefits

64.102 Compensation for Service-Connected Deaths for Veterans' Dependents
64.105 Pension to Veterans Widows or Widowers and Children
64.110 Veterans Dependency and Indemnity Compensation for Service-Connected Death

ACTION

72.001 The Foster Grandparent Program
72.003 Volunteers in Service to America
72.005 National Student Volunteer Program
72.009 The Youth Challenge Program

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